



# CONFERENCE PROGRAM

The 12<sup>th</sup> International Conference on Materials and Mechanisms  
of Superconductivity and High Temperature Superconductors  
(M<sup>2</sup>S-2018)

August 19 - 24, 2018, Beijing, China

Organized by: National Lab for Superconductivity,

Institute of Physics, Chinese Academy of Sciences

<http://www.m2s-2018.com/>



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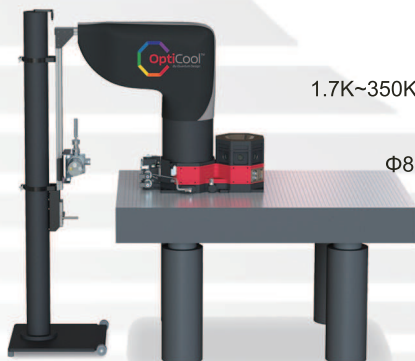
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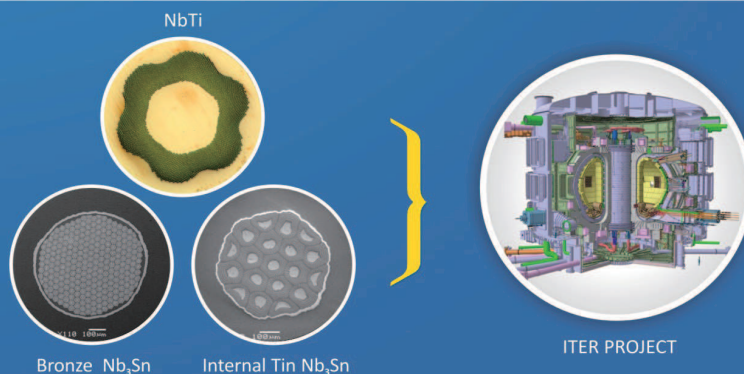
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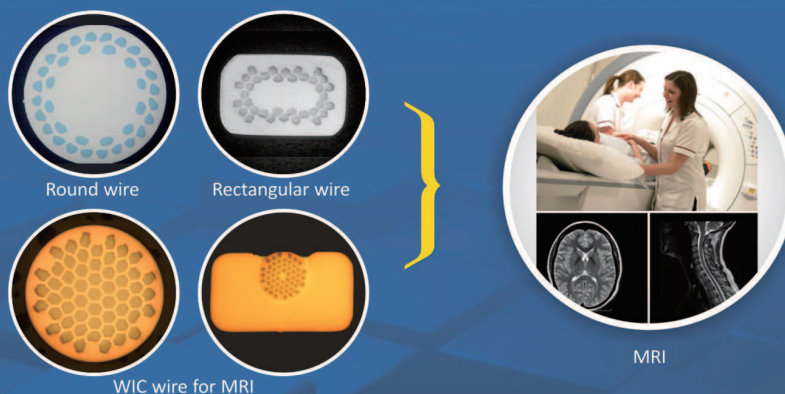
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### NbTi Superconducting Wires *for Healthcare*



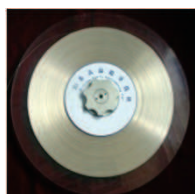
Innova Superconductor Technology Co., Ltd. (InnoST) is a leader in high temperature superconductor (HTS) industry in China, specializing in R&D, manufacture and sale of HTS wires and related application products. Now InnoST is a holding subsidiary of BENEFO, a listed company.

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### High Current Density Wire

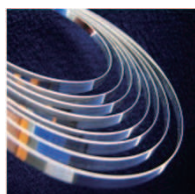


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Max. Tensile Stress	80MPa (95% $I_c$ )
Min. Bending Radius	30mm (95% $I_c$ )

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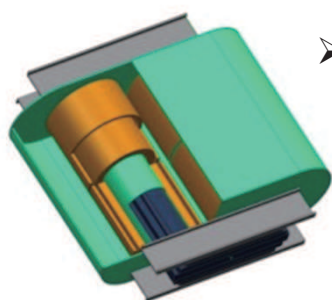
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## 1. Welcome Message

The M<sup>2</sup>S-2018 conference is the 12th in the series as an international event on superconductors and mechanisms of superconductivity held now every three years. The first conference took place in 1988 in Interlaken in the wake of the discovery of high temperature superconductivity by the Nobel Prize winners Johannes Georg Bednorz and Karl Alexander Müller. The conference has since taken place in Palo Alto (1989), Kanazawa (1991), Grenoble (1994), Beijing (1997), Houston (2000), Rio de Janeiro (2003), Dresden (2006), Tokyo (2009), Washington(2012) and Geneva (2015).

Superconductivity is a macroscopic quantum phenomenon that has been one of the most vibrant fields in condensed matter physics since its discovery in 1911. The discovery of high temperature cuprate superconductors and the iron-based superconductors has challenged the classical theories of condensed matter physics and opened a new chapter of strongly correlated electron systems. Superconductivity research has triggered ample opportunities in exploration of new materials, discovery of new phenomena, establishment of new theories and promising applications.

The aim of the Conference is to provide a platform for members of the international superconductivity community to report their latest results, exchange information and ideas, and foster collaborations. The Conference is dedicated to all aspects of basic superconductivity research in materials, mechanisms and phenomena of superconductivity, and its applications. The Conference will cover the following topics:

- Cuprate Superconductors
- Iron-Based Superconductors
- Heavy Fermion Superconductors
- Organic Superconductors
- Other Superconductors
- Topological Superconductors
- Mechanisms and Phenomenology of Superconductivity
- Applications
- Others

Beijing is the capital of China and the nation's political, cultural and educational center. The city's history dates back three millennia. It combines its ancient sites such as the Forbidden City and the Great Wall with modern architectures like the National Stadium and National Aquatics Center near the Beijing International Convention Center where the M<sup>2</sup>S-2018 Conference will take place.

**Welcome to M<sup>2</sup>S-2018, and looking forward to seeing you in Beijing!**

Xingjiang Zhou

Zhongxian Zhao

**On behalf of the Organizing Committee**



## 2. Committees

### 2.1 Local Organizing Committee

#### *Conference Chairs*



Xingjiang Zhou

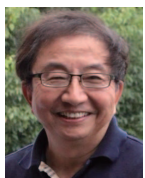
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Zhongxian Zhao

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Fuchun Zhang

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**Treasurer:** Yuan Huang, Kui Jin, Guoqiang Li and Xueqiang Zhang

**Communication:** Jie Yang, Shuai Zhang and Lei Shan

**Webmaster:** Shuai Zhang, Huiqian Luo and Yirong Jin

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# 12<sup>th</sup> International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors

August 19-24, 2018 Beijing · China



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•Setsuko Tajima	<i>Osaka University, Japan</i>
•Jeffrey Tallon	<i>Victoria University of Wellington, New Zealand</i>
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•Nanlin Wang	<i>Peking University, China</i>
•Haihu Wen	<i>Nanjing University, China</i>
•Zhengyu Weng	<i>Tsinghua University, China</i>
•Jochen Wosnitza	<i>HLD-EMFL-Dresden, Germany</i>
•Maw-Kuen Wu	<i>Institute of Physics, Academia Sinica, Taiwan, China</i>
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•Fuchun Zhang	<i>Kavli Institute of Theoretical Sciences, UCAS, China</i>
•Zhongxian Zhao	<i>Institute of Physics, CAS, China</i>
•Xingjiang Zhou	<i>Institute of Physics, CAS, China</i>

## 3. Prizes & Awards

### 3.1 Heike Kamerlingh-Onnes Prize

The **HEIKE KAMERLINGH-ONNES PRIZE** was established in 2000 by the organizers of the International Conference on the Materials and Mechanisms of Superconductivity (M<sup>2</sup>S) in honor of Prof. Heike Kamerlingh-Onnes who discovered superconductivity in 1911. It is awarded every three years at the M<sup>2</sup>S Conference, for outstanding experiments which illuminate the nature of superconductivity other than materials. The award is sponsored by Elsevier, Publisher of Physica C – Superconductivity and its Applications. The Prize consists of 7,500 Euro and a certificate.



The 2018 Heike Kamerlingh-Onnes Prize committee has decided that Prof. Yuji Matsuda (Kyoto University, Japan) and Prof. Louis Taillefer (Université de Sherbrooke, Canada) will share the 2018 Heike Kamerlingh-Onnes Prize "For illuminating the nature of superconductivity in unconventional superconductors"

**Prof. Yuji Matsuda:** "For pioneering magneto-transport and microwave experiments on exotic superconductors"

**Prof. Louis Taillefer:** "For seminal magneto-transport studies of heavy fermion and cuprate superconductors"



**Prize chair:**

Dirk van der Marel – *University of Geneva, Switzerland*

**Committee members:**

Dirk van der Marel – *University of Geneva, Switzerland*

Aharon Kapitulnik – *Stanford University, USA*

Gabriel Aeppli – *Paul Scherrer Institute, Switzerland*

Mark Golden – *University of Amsterdam, Netherlands*

Eli Zeldov – *Weizmann Institute, Israel*

### 3.2 Bernd T. Matthias Prize

**The BERND T. MATTHIAS PRIZE**, created in 1989 by friends and colleagues and originally sponsored by AT&T Bell Labs, is awarded in recognition of innovative contributions to the material aspects of superconductivity. Since 2000, the Prize has been sponsored by the Texas Center for Superconductivity at the University of Houston, whose founding director, Paul C. W. Chu, was Matthias' former student. The Prize consists of 6,000 USD and a certificate.



The committee for the Bernd T. Matthias Prize has selected the recipient for 2018, Prof. Katsuya Shimizu of Osaka University.

**Prof. Katsuya Shimizu:** "For his discovery of superconductivity in nonsuperconducting elements under high pressures with a  $T_c$  up to 29K."

**Prize chair:**

Paul C.W. Chu – *University of Houston, USA*

**Committee members:**

Paul C.W. Chu – *University of Houston, USA*

Ivan Bozovic – *Brookhaven National Laboratory, USA*

Hideo Hosono – *Tokyo Institute of Technology, Japan*

Frank Steglich – *Max Planck Institute for Chemical Physics, Germany*

Z. X. Zhao – *Institute of Physics, Chinese Academy of Sciences, China*

### 3.3 John Bardeen Prize

**The JOHN BARDEEN PRIZE** was established in 1991 by the organizers of the International Conference on the Materials and Mechanisms of Superconductivity (M<sup>2</sup>S) in honor of Dr. John Bardeen for "theoretical work that has provided significant insights on the nature of superconductivity and has led to verifiable predictions". This prize is funded by the Physics Department at the University of





Illinois, with an award of 6,000 USD to the recipient and a certificate.

The 2018 John Bardeen Prize is awarded to Andrey V. Chubukov (University of Minnesota), Igor Mazin (Naval Research Lab), and Sebastian Doniach (Stanford University) "For sustained theoretical contributions to the field of unconventional and multi-orbital superconductivity and superconducting quantum fluctuations"

**Prof. Andrey V. Chubukov:** "For seminal contributions to the theory of unconventional superconductivity, including applications to the iron-based superconductors."

**Prof. Igor Mazin:** "For influential first-principles theoretical approaches to a broad class of multi-orbital superconductors, such as  $\text{MgB}_2$  and the iron-based compounds."

**Prof. Sebastian Doniach:** "For pioneering work on Josephson junction coupled arrays and layered superconductors, quantum fluctuations in superconductors, and the possibility of a superconductor-insulator transition."

**Prize chair:**

Eduardo Fradkin – *University of Illinois, USA*

**Committee members:**

Eduardo Fradkin – *University of Illinois, USA*

Sue Coppersmith – *University of Wisconsin-Madison, USA*

Aharon Kapitulnik – *Stanford University, USA*

Subir Sachdev – *Harvard University, USA*

Joerg Schmalian – *Karlsruhe Institute of Technology, Germany*

John Tranquada – *Brookhaven National Laboratory, USA*

Hai-Hu Wen – *Nanjing University, China*

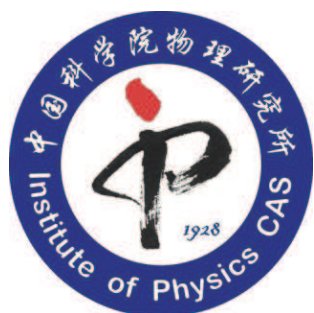
**Remark:**

**The Prize Award Ceremony will take place on Tuesday Aug. 21<sup>st</sup> at conference Room 1 (Convention Hall No.1).**

**Welome to join the ceremony and congratulate the winners!**

## 4. Supporting Organizations

1. Institute of Physics, Chinese Academy of Sciences (IOP, CAS)
2. National Lab for Superconductivity (NLSC)
3. National Natural Science Foundation of China (NSFC)
4. Chinese Academy of Sciences (CAS)
5. The International Union of Pure and Applied Physics (IUPAP)



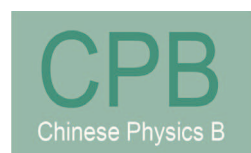


# 12<sup>th</sup> International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors

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## 5. Sponsors & Exhibitors





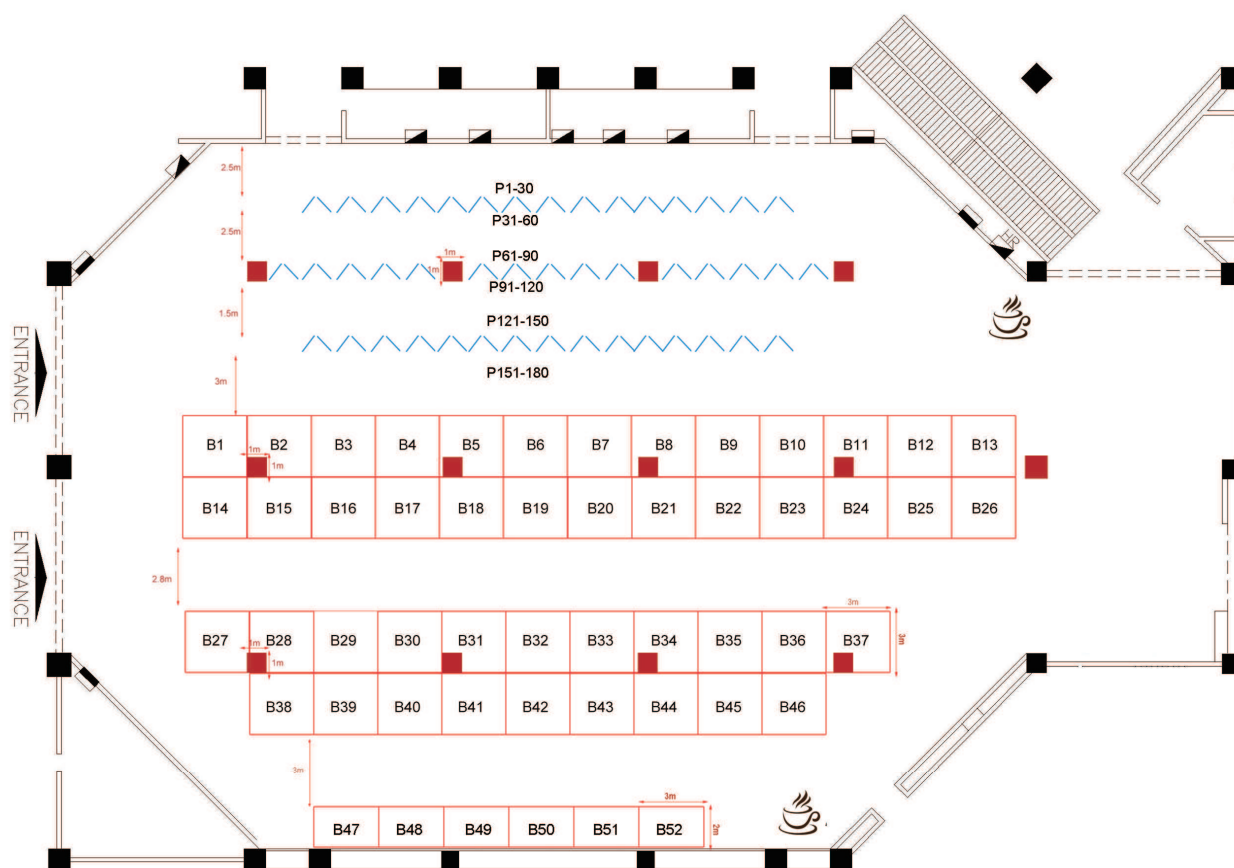
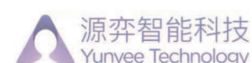
# 12<sup>th</sup> International Conference on Materials and Mechanisms of Superconductivity



立源兴业股份有限公司  
源顺国际有限公司



BEC 北京燕京电子有限公司  
BEIJING E-SCIENCE CO., LTD



4号会议厅  
Conception Hall No.4



## 6. Conference Information

### 6.1 Registration

Registration fee for the conference includes admission to all technical sessions, entrance to the Exhibition and Welcome Reception, coffee/tea breaks, meals of lunch, as well as a copy of the Conference Program.

Because of financial constraints, we will not provide financial support for the invited speakers.

#### Registration Hour

Date	Aug. 19 <sup>th</sup> (Sun.)	Aug. 20 <sup>th</sup> (Mon.)	Aug. 21 <sup>st</sup> (Tue.)	Aug. 22 <sup>nd</sup> (Wed.)	Aug. 23 <sup>rd</sup> (Thu.)	Aug. 24 <sup>th</sup> (Fri.)
Time	14:00~20:00	07:30~18:00	08:30~18:00	08:30~18:00	08:30~18:00	08:30~12:30

#### Onsite Registration fee

Category	On-Site
Delegate	CNY 5200
Student(Retired Scientist)	CNY 3900
Accompanying Person	CNY 2100
Banquet	CNY 200

#### Receipt of registration

For Pre-registration, Chinese delegates can pick up their Invoice (发票) at Cashier counter at the Registration Desk from Aug. 21<sup>st</sup> to Aug. 23<sup>rd</sup>.

For On-site registration, the Invoice (发票) can be only sent by Express Mail after the conference (delivery cost will be paid by receiver).

For international delegates who need a receipt, please request from Information Counter at the Registration Desk.

#### Certificate of Attendance

If you need a certificate of attendance, please request from Information Counter at the Registration Desk.

#### Access to Abstracts to the web

All the abstracts (Oral and Poster) can be accessible via M<sup>2</sup>S-2018 website at <http://www.m2s-2018.com/>.





### Conference photos

There are several photographers to take photos during the conference. The group photo of conference can be downloaded via M<sup>2</sup>S -2018 website at <http://www.m2s-2018.com/>.

Other photos can be accessible via the links provided on M<sup>2</sup>S -2018 website.

### Financial support for overseas traveling

Sponsored and funded by the International Union of Pure and Applied Physics (IUPAP), we will provide financial support to assist in the overseas traveling expenses for delegates coming to attend the M<sup>2</sup>S -2018 conference from Developing Countries. Applicants should send the application, and a CV with the list of publications in last 5 years, to [m2s2018@iphy.ac.cn](mailto:m2s2018@iphy.ac.cn) before the deadline July. 15, 2018. The notice of application approval will be sent out before August 3, 2018. The support will be paid by cash to the approved applicants in the registration desk when the applicants attend the M<sup>2</sup>S -2018 Conference.

## 6.2 Venue & Transportation

### Beijing International Convention Center (BICC)

The Beijing International Convention Center is a well-known enterprise in Beijing. The Center is situated on the site of the Asian Games Village, a flourishing area of Beijing which has a collection of conference centers, businesses, shopping centers and entertainment venues. It is located on the North Fourth Ring road, just 20 kilometers from the International Capital Airport and 9 kilometers from the city center. The Center is also very close to the Olympic Games central area, including the Bird's Nest, Water Cube, Olympic Green Sightseeing Tower, etc.

For more information, please visit: <http://www.bicc.com.cn/>

**Address in Chinese:** 北京市朝阳区北辰东路 8 号 北京国际会议中心







## How to get to the Beijing International Convention Center (BICC)?

### From Beijing Capital Airport to BICC

#### (1) By Taxi (出租车)



Beijing Capital International Airport provides taxi stations at the airport, so you can take a taxi from the airport to the conference venue.

##### Taxi Locations:

T1: Outside Gate 1 on F1

T2: Outside Gate 5 to 9 on F1

T3: Please refer to the signs inside the terminal building

**Fare:** About RMB 120 (USD 20 including toll). The cost is subject to change depending on actual traffic conditions.

#### (2) By Airport Shuttle Bus (机场巴士)



Take the shuttle bus Line 5 (destination: Zhongguancun 中关村) and get off at Asian Games Village (Anhui Bridge 亚运村站 安慧桥) station.

Fare: RMB 24 (USD 4)

#### (3) By Airport Express (机场快轨)



1. Airport Express (get off at Dongzhimen 东直门) – Special Public bus No.2 (get off at Anhuiaqabei 安慧桥北)

2. Airport Express (get off at Sanyuanqiao 三元桥) - Subway 10 (get off at Beitucheng 北土城) - Subway 8 (get off at Olympic Sports Center 奥体中心)

### From Railway Station to BICC

#### 1. From Beijing Railway Station to BICC



1) Subway 2 (get off at GulouDajie 鼓楼大街) - Subway 8 (get off at Olympic Sports Center 奥体中心)

2) Subway 2 (get off at Yonghegong 雍和宫) – Subway 5 (get off at Huixinxijie Beikou 惠新西街北口)

3) Special Public Bus No. 2 (get off at Anhuiaqabei 安慧桥北)

#### 2. From Beijing West Railway Station

1) Subway 9 (get off at Baishiqiaonan 白石桥南) - Subway 6 (get off at Nanluoguxiang 南锣鼓巷) - Subway 8 (get off at Olympic Sports Center 奥体中心)

2) Public Bus No.387 (get off at Anhuiaqao Bei 安慧桥北)

#### 3. From Beijing South Railway Station

1) Subway 14 (get off at Puhuangyu 蒲黄榆) – Subway 5 (get of at Huixinxijie Beikou 惠新西街北口) - Public Bus 983/658/386/490 (get off Yayuncun 亚运村)

2) Subway 4 Daxing Line (get off at Xuanwumen 宣武门) – Subway 2 (get off at Guloudajie

鼓楼大街) – Subway 8 (get off at Olympic Sports Center 奥体中心)

3) Subway 4 Daxing line (get off at Pinganli 平安里) - Subway 6 (get off at Nanluoguxiang 南锣鼓巷) – Subway 8 (get off at Olympic Sports Center 奥体中心)

#### Remarks:

1. You may change money at the Banks or Money Exchange at the airport beforehand since you need Chinese money (RMB) to pay for the means of transportation.
2. There will be quite some walk with ups and downs especially at the subway station for transfers if you choose to go to BICC by either airport shuttle, airport express or subway. Our previous conference delegates complained a lot about the inconveniences caused by taking airport express and subway, so *it is preferred that you go to BICC by taxi*.

### 6.3 Accommodations



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## 1. Beijing Continental Grand Hotel (北京五洲大酒店) ★★★★★

<http://www.bcghotel.com/English/>

Tel: 0086 10 8498 0105 Email: yudingbu@bicc.com.cn

## 2. North Star Huiyuan Prime Hotel (北辰汇园酒店公寓贵宾楼) ★★★★★

<http://www.huiyuangongyu.com.cn> (Reservation Code: 123)

Tel: Mr. Zhou Bin 186 1125 0221 Email: zhoubin8522@qq.com

## 3. North Star Yayuncun Hotel (北辰亚运村宾馆) ★★★

<http://www.huiyuangongyu.com.cn> (Reservation Code: 123)

Tel: Mr. Zhou Bin 186 1125 0221 Email: zhoubin8522@qq.com

## 4. V-Continent Beijing Parkview Wuzhou Hotel (北辰五洲皇冠国际酒店) ★★★★★

Tel: 0086 10 64817138 Email: reservation@v-continent.com

## 5. Celebrity International Grand Hotel (北京名人国际大酒店) ★★★★★

Tel: 0086 10 5865 1166-6116 Email: 13581773237@126.com

## 6. North Star Yuanchenxin International Hotel (北辰元辰鑫国际酒店) ★★★★★

<http://www.ycxhotel.com/> (Reservation Code: 818)

Tel: 0086 10 82250362 OR 15910973379 Email: zhaogurong\_1314@126.com

## 6.4 Reception, Banquet & Lunch

### Welcome Reception

There will be a Welcome Reception. Come and mingle with your old and new friends!

- Date and Time: Sunday, Aug. 19<sup>th</sup> / 18:00-20:00
- Place: Conference Room 1 (Convention Hall No. 1)

### Conference Banquet (Tickets Required)

We prepare a banquet for you to discuss among your colleagues and coworkers. We will have a meal along with a few Chinese traditional performances. The banquet requires a ticket (CNY 200), you can pay when you register online or purchase the ticket onsite.

- Date and Time: Wednesday, Aug. 22<sup>nd</sup> / 19:00-21:00
- Place: Conference Room 1 (Convention Hall No. 1)



### Lunch (Tickets Required)

Registration fee for the conference includes daily lunch:

- Date and Time: Aug. 20<sup>th</sup> –Aug. 23<sup>rd</sup>, 12:05-14:00
- Place: Ballroom on 2F of Beijing Continental Grand Hotel (五洲大酒店二层), with connecting corridor to BICC from 2F (会场二层有连廊通往五洲大酒店)

### 6.5 WiFi

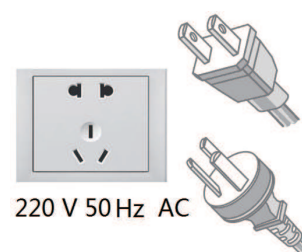
Free WiFi is available for all participants at the conference center.

Wifi Network: *BICC-WLAN*

No password is required.

### 6.6 Electricity

The standard voltage in China is 220 V, 50 Hz, AC. The outlet is three-pronged and you are recommended to bring your own adaptor.



### 6.7 Emergency Numbers

Police: 110    Ambulance: 120    Fire: 119    Traffic Accident: 122    Directory Inquiry: 114

### 6.8 Disclaimer

#### Badges

Delegates will receive a name-badge at the reception desk, upon registration. The badge must be worn prominently in order to gain access to the congress area during all scientific and social events. Admission will be refused to anyone not in possession of an appropriate badge.

#### Medical Service and Healthy Insurance

Neither the organization nor the conference agency is responsible for individual medical, travel or personal insurance. Delegates are requested to arrange their own travel and health insurance. Delegates who are currently on medication should bring an adequate medical supply since the medication may not be available locally. Please inform the organizers in advance should you have major medical concerns. Delegates are responsible for their own expenses incurred from local medical services. The organizers cannot assume liability for changes in the program due to external circumstances.



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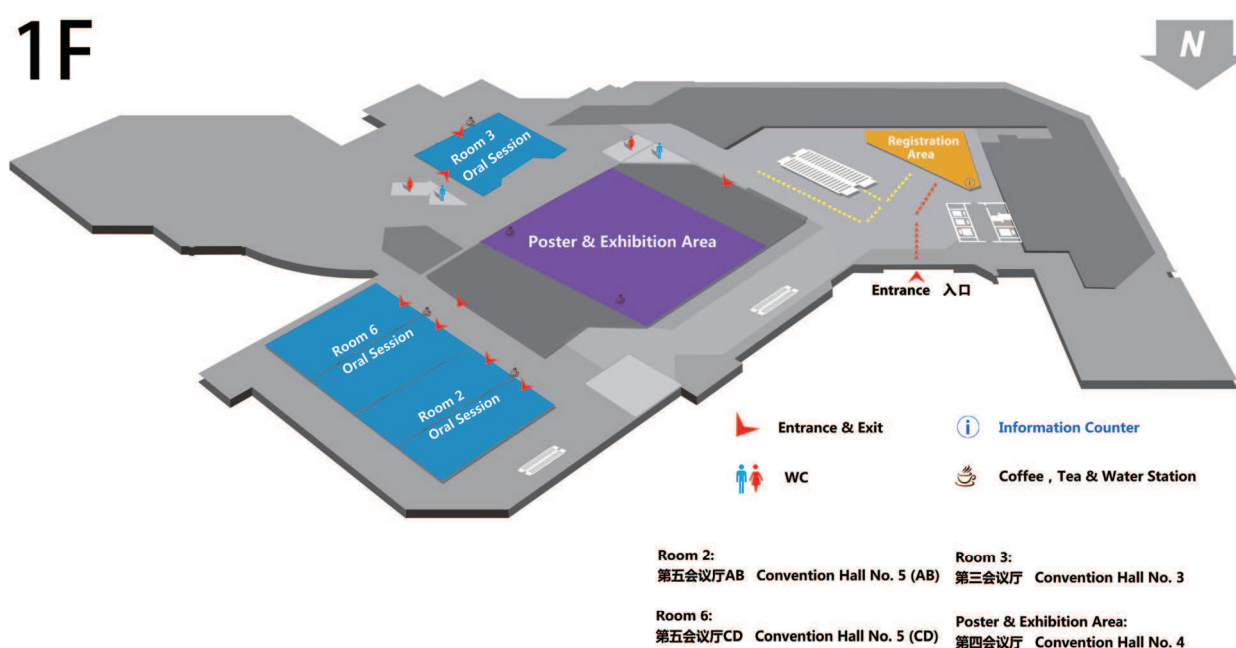
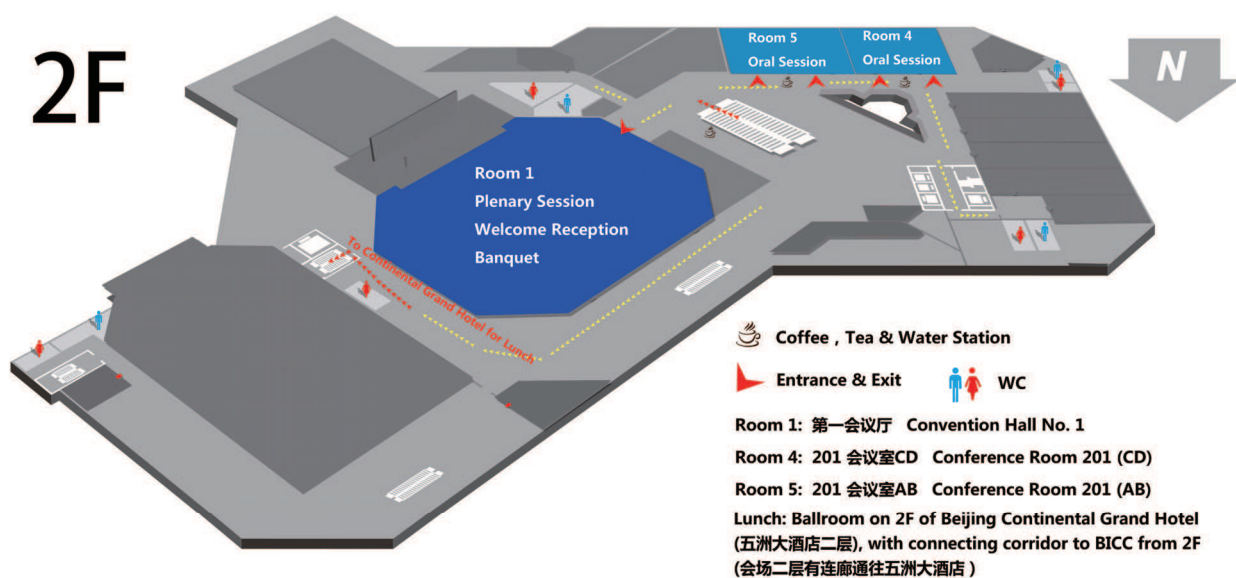


## 6.9 Local contacts

Conference : Email: m2s2018@iphy.ac.cn Tel.: +86-10-82649167

Hotel and Tours : Email: m2s2018@chinastargroup.com Tel.: +86-10-8456 2890-216

## BICC Conference Floor Plans





## 7. Plenary Speakers

### Yuji Matsuda



Kyoto University, Japan

Title: Pseudogap in Cuprates, Thermodynamic Evidence for  
Nematic Phase Transition

Schedule: 09:00-9:40 Aug. 20<sup>th</sup> (Mon.)

### Dunghai Lee



University of California, Berkeley, USA

Title: High-Temperature Superconductivity in Iron  
Chalcogenides

Schedule: 09:40-10:20 Aug. 20<sup>th</sup> (Mon.)

### Ivan Bozovic



Brookhaven National Laboratory and Yale University, USA

Title: What Makes Cuprate Superconductors so Amazing?

Schedule: 10:45-11:25 Aug. 20<sup>th</sup> (Mon.)

### Andrew Cleland



University of Chicago, USA

Title: Superconducting Qubits Enable Quantum Control of  
Surface Wave Phonons

Schedule: 11:25-12:05 Aug. 20<sup>th</sup> (Mon.)



**Zhi-Xun Shen**



Stanford University, USA

Title: Cooperative Interactions as a Route to High  
Temperature Superconductivity

Schedule: 08:30-09:10 Aug. 21<sup>st</sup> (Tue.)

**Bernhard Keimer**



MPI for Solid State Research, Stuttgart, Germany

Title: Scattering from High-Temperature Superconductors:  
New Insights and Perspectives

Schedule: 09:10-09:50 Aug. 21<sup>st</sup> (Tue.)

**J. C. Seamus Davis**



Cornell University, USA

Title: Discovery and Exploration of the Cuprate Pair Density  
Wave State

Schedule: 08:30-09:10 Aug. 22<sup>nd</sup> (Wed.)

**Frank Steglich**



MPI for Chemical Physics of Solids – Dresden, Germany

Title: Quantum Criticality and Unconventional  
Superconductivity in Heavy Fermions

Schedule: 09:10-09:50 Aug. 22<sup>nd</sup> (Wed.)

**Pablo Jarillo-Herrero**



Massachusetts Institute of Technology, USA

Title: Magic Angle Graphene: a New Platform for Strongly  
Correlated Physics

Schedule: 08:30-09:10 Aug. 23<sup>rd</sup> (Thu.)



**Louis Taillefer**



University of Sherbrooke, Canada

Title: The Pseudogap Critical Point of Cuprate Superconductors

Schedule: 09:10-09:50 Aug. 23<sup>rd</sup> (Thu.)

**Pingxiang Zhang**



Northwest Institute for Nonferrous Metal Research, China

Title: Progress on Superconducting Materials for High-Field  
Application in China

Schedule: 10:25-11:05 Aug. 24<sup>th</sup> (Fri.)

**Erez Berg**



University of Chicago, USA

Title: Progress on Quantum Critical Metals

Schedule: 11:05-11:45 Aug. 24<sup>th</sup> (Fri.)

**Xianhui Chen**



University of Science and Technology of China, China

Title: Tunable Superconductivity and Phase Transitions by  
Field Effect Transistor

Schedule: 11:45-12:25 Aug. 24<sup>th</sup> (Fri.)





## **8. Scientific Programs**

### **Information for Presenter and Chair**

#### **Oral Sessions**

All invited and contributed speakers must report to the session chairs prior to the beginning of the session.

The allocation for each Plenary presentation is 40 minutes.

- a) 35 minutes for the presentation
- b) 5 minutes for Q & A

The allocation for each Invited presentation is 20 minutes.

- a) 15 minutes for the presentation
- b) 5 minutes for Q & A

The allocation for each Contributed presentation is 15 minutes.

- a) 12 minutes for the presentation
- b) 3 minutes for Q & A

#### **Guideline for Oral Sessions**

The Chair of each oral session is expected to arrive at the session room at least 10 minutes prior to the session.

- Session rooms will be ready with laptop computers installed with MS PowerPoint, which the speakers are encouraged to use for their presentations in order to avoid delays in schedule.
- The speakers are advised to bring their PowerPoint presentation files on USB memory sticks AND be also ready with a backup version of their presentations. Please transfer the file to the laptop computer in the session room during the break between the sessions
- If you are a Mac user, please bring your Mac-to-VGA adapter.
- Speakers should arrive in the session room 15 minutes BEFORE the start of their sessions to report to the session chair.

#### **Guideline for Poster Sessions**

Posters are located on Level 1 (exhibition hall). Poster sessions are scheduled in the noon from 12:05 to 14:00 during lunch time, and changed every day.



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Please check the program for details on the session times. Presenting authors of posters are requested to stand by their posters and discuss with participants.

**Poster Size:** portrait orientation only, pre-printed sheet size 90 cm [35 in] (width) x 120 cm [47 in] (height).

Set up and take down time:

Poster Presentation Date	Set up after	Take down before
Monday, August 20 <sup>th</sup>	07:30 on Monday	18:00 on Monday
Tuesday, August 21 <sup>st</sup>	07:30 on Tuesday	18:00 on Tuesday
Wednesday, August 22 <sup>nd</sup>	07:30 on Wednesday	18:00 on Wednesday
Thursday, August 23 <sup>rd</sup>	07:30 on Thursday	18:00 on Thursday

\* If you do not take down your poster after 18:00 at the presentation day, your posters will be disposed by conference organizers.

Conference organizers will provide each presenter with a board for the poster, please look for your Board ID Numbers. Authors will be responsible to do printing and put up/take down the poster. Both double-side adhesive and scissors are available onsite. And the volunteers will assist you in putting up posters. So please feel free to go to them for help.

**During the poster sessions, best posters will be selected based on the criteria of scientific interest and quality of the presentation. The Best Poster Award, consisting of bonus and a certificate, will be given to the presenting authors during the closing session of M<sup>2</sup>S-2018.**

### Room numbers

Room numbers for M <sup>2</sup> S-2018	BICC conference room	Level of BICC
Room 1	Convention Hall No. 1	2F
Room 2	Convention Hall No. 5(A+B)	1F
Room 3	Convention Hall No. 3	1F
Room 4	Conference Room 201 (C+D)	2F
Room 5	Conference Room 201 (A+B)	2F
Room 6	Convention Hall No. 5(C+D)	1F
Poster & Exhibition area	Convention Hall No. 4	1F

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## 8.1 Program at a glance

### Sunday, August 19<sup>th</sup>, 2018

14h00 20h00	Registration
18h00 20h00	Welcome Reception (Room 1)

### Monday, August 20<sup>th</sup>, 2018

07h30 08h45	Registration				
	Room 1				
08h45 09h00	Opening				
09h00 09h40	Plenary 1 Yuji Matsuda				
09h40 10h20	Plenary 2 Dunghai Lee				
	Break 25 minutes				
10h45 11h25	Plenary 3 Ivan Bozovic				
11h25 12h05	Plenary 4 Andrew Cleland				
12h05 14h00	Poster Session 1 & Lunch				
	Room 2	Room 3	Room 4	Room 5	Room 6
14h00 15h55	<b>Mo-S01</b> <b>Cuprates</b> <b>SC State-1</b>	<b>Mo-S02</b> <b>IBS</b> <b>Topological</b>	<b>Mo-S03</b> <b>2D SC</b>	<b>Mo-S04</b> <b>SC-Reduced</b> <b>Symmetry</b>	<b>Mo-S05</b> <b>High T<sub>c</sub></b> <b>Mechanism</b>
115 mins	Andrea Damascelli P. Marchetti Setsuko Tajima Yuanbo Zhang Alessandra Lanzara Eduardo Marino	Wei Li Shik Shin Hong Ding Peter Johnson Ziqiang Wang Gang Xu	Ding Zhang Yoshihiro Iwasa Jian Wang E. Baggio-Saitovitch Shuyun Zhou Adolfo Avella	Naoto Nagaosa Manfred Sigrist Huiqiu Yuan Ernst Bauer Deepak Singh	Bruce Normand Jiangping Hu José Lorenzana Mark Golden Masatoshi Imada Michael Reznikov
	Break 20 minutes				
16h15 18h20	<b>Mo-S06</b> <b>Cuprates</b> <b>Elect. State-1</b>	<b>Mo-S07</b> <b>IBS</b> <b>10th Anniversary</b>	<b>Mo-S08</b> <b>Devices</b>	<b>Mo-S09</b> <b>SrTiO<sub>3</sub></b> <b>&amp; Iridates</b>	<b>Mo-S10</b> <b>Mott</b> <b>Physics-1</b>
125 mins	Daniel Dessau Atsushi Fujimori Changyoung Kim Peter Hirschfeld Masafumi Horio Yigui Zhong Marta Zonno	Hideo Hosono Andrey Chubukov Paul C.W. Chu Xiaoli Dong Lili Wang Guanghan Cao	Eli Zeldov Xiaoming Xie Stephen Remillard Junlan Zhong Alejandro Silhanek Yosef Yeshurun Kaveh Delfanazari	Veronique Brouet Kamran Behnia Siddharth Saxena Ilya Sochnikov Yuefeng Nie Yasuhide Tomioka	Yingying Peng Guang-Ming Zhang Jian-Xin Li Zheng-Yu Weng Kazuhiro Kuboki



**Tuesday, August 21<sup>st</sup>, 2018**

	<b>Room 1</b>				
08h30	<b>Plenary 5</b> Zhi-Xun Shen				
09h10					
09h10	<b>Plenary 6</b> Bernhard Keimer				
09h50					
	Break 20 minutes				
	<b>Room 2</b>	<b>Room 3</b>	<b>Room 4</b>	<b>Room 5</b>	<b>Room 6</b>
10h10	<b>Tu-S11</b>	<b>Tu-S12</b>	<b>Tu-S13</b>	<b>Tu-S14</b>	<b>Tu-S15</b>
12h05	<b>Cuprates</b>	<b>IBS</b>	<b>Topological</b>	<b>Ruthenates</b>	<b>SC General</b>
115	<b>SC State-2</b>	<b>Elect. State-1</b>	<b>State-1</b>		<b>-Failed SC</b>
mins	Amit Keren	Xingjiang Zhou	Yi Zhou	Qiang-Hua Wang	Harold Hwang
	Martin Greven	Donghui Lu	Wan Kyu Park	Andrew Mackenzie	Steven Kivelson
	Dirk Van der Marel	Sergey Borisenko	Congjun Wu	Ying Liu	Valerii Vinokour
	Peter Armitage	Yunkyu Bang	Ryotaro Arita	Stuart Brown	Aviad Frydman
	John Tranquada	Fengmiao Li	Ching-Kai Chiu	Yoshiteru Maeno	
		Dong Qian		Siham Benhabib	
12h05	<b>Poster Session 2 &amp; Lunch</b>				
14h00					
	<b>Room 2</b>	<b>Room 3</b>	<b>Room 4</b>	<b>Room 5</b>	<b>Room 6</b>
14h00	<b>Tu-S16</b>	<b>Tu-S17</b>	<b>Tu-S18</b>	<b>Tu-S19</b>	<b>Tu-S20</b>
16h00	<b>Loop</b>	<b>IBS</b>	<b>Vortex</b>	<b>New SC</b>	<b>SC General</b>
	<b>Current</b>	<b>Elect. State-2</b>	<b>Matter-1</b>	<b>Materials-1</b>	<b>-Nematic States</b>
120	Chandra Varma	Shuheng Pan	Judy Wu	Jun Zhao	Wei Bao
mins	Peter Abbamonte	Tetsuo Hanaguri	Roland Willa	Shancai Wang	Hiroshi Kontani
	Philippe Bourges	Abhay Pasupathy	Yoram Dagan	Kui Jin	Zhiping Yin
	Lei Shu	Tadashi Machida	Victor Moshchalkov	Ivan Schuller	Liangjian Zou
	Stephen Hayden	Zbigniew Bukowski	Masaru Kato	Nicholas Plumb	Edoardo Trabeldo
	Han-Yong Choi	D.T. Adroja	Morten Eskildsen	Xuan Shen	Takeshi Mizushima
	Break 15 minutes				
16h15	<b>Tu-S21</b>	<b>Tu-S22</b>	<b>Tu-S23</b>	<b>Tu-S24</b>	<b>Tu-S25</b>
18h05	<b>Cuprates</b>	<b>IBS-</b>	<b>Electrical</b>	<b>New SC</b>	<b>SC-</b>
	<b>Elect. State-2</b>	<b>Orbital</b>	<b>Applications-1</b>	<b>Materials-2</b>	<b>Mixed Views</b>
110	Yayu Wang	Girsh Blumberg	Chuanbing Cai	Xiaolong Chen	Hong Yao
mins	Yi Yin	Yan Zhang	Xavier Obradors	Weiqliang Yu	Eun-Ah Kim
	Christoph Renner	Qimiao Si	Xiaolin Wang	Robert Cava	S. Doniach
	Wei Ku	Laura Fanfarillo	David Larbalestier	Malte Grosche	Yurii Proshin
	Takayuki Kawamata	Ming Yi	Jianyi Jiang	Shinichi Ishiguri	
	Tadashi Adachi		Xiuhua Song		
18h05	Break 25 minutes				
18h30					
18h30	<b>Prize Award Ceremony (Room 1)</b>				
	John Bardeen Prize winners 2018				
20h00	Heike Kamerlingh-Onnes Prize winners 2018				
	Bernd T. Matthias Prize winners 2018				



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Wednesday, August 22<sup>nd</sup>, 2018

	Room 1				
08:30	<b>Plenary 7</b> J. C. Seamus Davis  <b>Plenary 8</b> Frank Steglich				
09:10					
09:10					
09:50					
	Break 20 minutes				
	Room 2	Room 3	Room 4	Room 5	Room 6
10h10	<b>We-S26</b>	<b>We-S27</b>	<b>We-S28</b>	<b>We-S29</b>	<b>We-S30</b>
12h00	<b>Cuprates</b>	<b>IBS</b>	<b>Electrical</b>	<b>Heavy</b>	<b>SC General</b>
	<b>Charge Order-1</b>	<b>Elect. State-3</b>	<b>Applications-2</b>	<b>Fermion-1</b>	<b>-Excited State</b>
110 mins	Matthieu Le Tacon	Luca De Medici	Werner Prusseit	Yi-feng Yang	Wanzheng Hu
	Shiping Feng	Ming Shi	Yanwei Ma	John Saunders	Nan-Lin Wang
	Johannes Zaanen	Amalia Coldea	Zhixiang Shi	Dariusz Kaczorowski	Dirk Manske
	Takami Tohyama	Takahiro Hashimoto	Ying Xin	Tanmoy Das	Thomas Devereaux
	Evandro De Mello	Chi Ming Yim	Eisterer Michael	Joseph Betouras	Emanuele Dalla Torre
	Dror Orgad	Jose Rodriguez	Tsuyoshi Tamegai	Kenji Ishida	
12h05	<b>Poster Session 3 &amp; Lunch</b>				
14h00					
	Room 2	Room 3	Room 4	Room 5	Room 6
14h00	<b>We-S31</b>	<b>We-S32</b>	<b>We-S33</b>	<b>We-S34</b>	<b>We-S35</b>
15h45	<b>Cuprates</b>	<b>IBS</b>	<b>Vortex</b>	<b>Heavy</b>	<b>Phase Diagram</b>
	<b>Normal State-1</b>	<b>Materials-1</b>	<b>Matter-2</b>	<b>Fermion-2</b>	<b>&amp; Transition</b>
105 mins	Cyril Proust	Jinguang Cheng	Hermann Suderow	H. Von Loehneysen	Shiliang Li
	Dragana Popovic	Shiyan Li	Johann Blatter	Filip Ronning	C. Panagopoulos
	Neven Barisic	Akira Iyo	Gabriela Pasquini	Philip Moll	Meigan Aronson
	Greg Boebinger	Hechang Lei	Marcin Konczykowski	Ryusuke Ikeda	Fa Wang
	Bastien Michon	Yue Sun	Taichiro Nishio	Soon-Gil Jung	Lev Mazov
		Yoji Koike	Vadim Geshkenbein		
	Break 30 minutes				
16h15	<b>We-S36</b>	<b>We-S37</b>	<b>We-S38</b>	<b>We-S39</b>	<b>We-S40</b>
18h10	<b>Cuprates</b>	<b>IBS</b>	<b>Topo. State</b>	<b>SC-</b>	<b>SC-Common</b>
	<b>Normal State-2</b>	<b>Dynamics-1</b>	<b>-Nematic</b>	<b>Light Element</b>	<b>Features</b>
115 mins	Alexei Tsvetlik	Christian Bernhard	Guo-qing Zheng	Warren Pickett	Daoxin Yao
	Qijin Chen	Xianggang Qiu	Hai-Hu Wen	Zhong-Yi Lu	George Sawatzky
	Antony Carrington	Rudolf Hackl	Donglai Feng	Kosmas Prassides	Jeffery Tallon
	Richard Greene	Leonardo Degiorgi	Shingo Yonezawa	Katsuya Shimizu	Garnet Kin-Lic Chan
	Milan Allan	Jimin Zhao	Joerg Schmalian	Guoying Gao	Oleg Dolgov
			Antheunis De Visser		
	Break 50 minutes				
19h00	<b>Banquet (Room 1)</b>				
21h00					


Thursday, August 23<sup>rd</sup>, 2018

	Room 1				
08:30 09:10 09:10 09:50	Plenary 9   Pablo Jarillo-Herrero				
	Plenary 10   Louis Taillefer				
	Break 20 minutes				
	Room 2	Room 3	Room 4	Room 5	Room 6
10h10 12h05  115 mins	Th-S41 Cuprates Pseudogap Tao Li Bastien Loret Safarali Djumanov Eric Andersson Eun-Gook Moon Robert Markiewicz	Th-S42 IBS Nematicity-1 Clifford Hicks Pengcheng Dai Tao Wu T. Shibauchi Tong Zhang Rui Zhou	Th-S43 Topo.State -Majorana Jinfeng Jia Rolf Walter Lortz Fuchun Zhang Qinglin He Ali Yazdani Yang Peng	Th-S44 SC-Twisted Graphene Leni Bascones Philip Phillips T. Takahashi Fanqi Yuan Fan Yang Artem Sboychakov	Th-S45 SC- New Insights Jorge E. Hirsch Xin-Cheng Xie Ulrich Welp Vidya Madhavan Hiroyasu Koizumi
12h05 14h00	Poster Session 4 & Lunch				
	Room 2	Room 3	Room 4	Room 5	Room 6
14h00 15h55  115 mins	Th-S46 Cuprates PDW Patrick Lee Ting-Kuo Lee Eduardo Fradkin John Wei Stephen Edkins Edwin Huang	Th-S47 IBS Dynamics-2 Yuan Li Markus Braden Joerg Fink Gabriel Kotliar A. Charnukha Huiqian Luo	Th-S48 2D SC Interface Can-Li Song Minghu Pan Jean-Marc Triscone Jiacai Nie Yun-Yi Pai Dawei Shen	Th-S49 New SC Materials-3 Liling Sun Minghu Fang Carmen Almasan Kazutaka Kudo Danfeng Li	Th-S50 Mott Physics-2 Johan Chang Arun Bansil Yan Chen Tao Xiang A.-M. S. Tremblay Wei Wu
	Break 20 minutes				
16h15 18h25  130 mins	Th-S51 Cuprates Charge Order-2 Jennifer Hoffman Marc-Henri Julien David Hawthorn Wei-Sheng Lee G. Ghiringhelli Shinji Kawasaki Alex Frano	Th-S52 IBS Materials-2 C. Meingast R. Fernandes Harald Jeschke Mykola Cherpak Vadim Grinenko Gang Wang	Th-S53 Topological State-2 Li Lu Markus Kriener Zhu-An Xu Lu Li Philip Brydon Akito Daido Alireza Akbari	Th-S54 Cr-Based SC & FM SC Jianlin Luo Zhi-An Ren Kazuhiko Kuroki Zengwei Zhu Jean-Pascal Brison	Th-S55 BCS-BEC Crossover Kazushi Kanoda Yuta Mizukami Amit Kanigel Kyosuke Adachi Mats Granath Yuji Nakagawa

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**Friday, August 24<sup>th</sup>, 2018**

	Room 2	Room 3	Room 4	Room 5	Room 6
8h30 10h05  95 mins	<b>Fr-S56 Cuprates Dynamics</b> Marco Grilli Fulvio Parmigiani S. Sebastian Doohee Cho Igor Vinograd	<b>Fr-S57 IBS Nematicity-2</b> Bernd Buechner Kyoko Ishizaka Rong Yu Shigeru Kasahara	<b>Fr-S58 2D SC TMD</b> Sean Hartnoll Vivek Aji Matteo Calandra Dragan Mihailovic Qihong Chen	<b>Fr-S59 SC- Organic</b> Erio Tosatti C. Marrache-Kikuchi Xiaojia Chen Tomas Samuely Katsumi Tanigaki	<b>Fr-S60 New Developments</b> Changqing Jin Shin-ichi Uchida Yasutomo Uemura Ruihua He
	Break 20 minutes				
	Room 1				
10h25 11h05	<b>Plenary 11</b> Pingxiang Zhang				
11h05 11h45	<b>Plenary 12</b> Erez Berg				
11h45 12h25	<b>Plenary 13</b> Xianhui Chen				
12h25 12h45	<b>Closing, Best Poster Awards and Next Congress</b>				

## Scientific Presentation Time:

**Plenary Talks:** 40 mins (35 mins talk + 5 mins Q&A)

Invited Talks: 20 mins (15 mins talk + 5 mins Q&A)

**Contributed Talks:** 15 mins (12 mins talk + 3 mins Q&A)



## 8.2 Detailed Program

### Monday, August 20<sup>th</sup>, 2018

07:30-08:45	Registration	
08:45-09:00	<b>Opening Ceremony</b> <i>Chair: Fuchun Zhang, Univ. of CAS, China</i>	Room 1
09:00-09:40	<b>Plenary 1: Pseudogap in Cuprates, Thermodynamic Evidence for Nematic Phase Transition</b> <i>Yuji Matsuda, Kyoto Univ., Japan</i> <i>Chair: Fuchun Zhang, Univ. of CAS, China</i>	Room 1
09:40-10:20	<b>Plenary 2: High-Temperature Superconductivity in Iron Chalcogenides</b> <i>Dunghai Lee, Univ. of California, Berkeley, USA</i> <i>Chair: Fuchun Zhang, Univ. of CAS, China</i>	Room 1
10:20-10:45	Coffee Break 25 minutes	
10:45-11:25	<b>Plenary 3: What Makes Cuprate Superconductors so Amazing?</b> <i>Ivan Bozovic, Brookhaven Nat. Lab. and Yale Univ.</i> <i>Chair: Tao Xiang, Inst. of Physics, CAS, China</i>	Room 1
11:25-12:05	<b>Plenary 4: Superconducting Qubits Enable Quantum Control of Surface Wave Phonons</b> <i>Andrew Cleland, Univ. of Chicago</i> <i>Chair: Tao Xiang, Inst. of Physics, CAS, China</i>	Room 1
12:05-14:00	Poster Session 1: Materials & Applications / Lunch	
14:00-15:55	Parallel Oral Sessions : Mo-S01 – Mo-S05	Room 2-6
15:55-16:15	Coffee Break 20 minutes	
16:15-18:20	Parallel Oral Sessions : Mo-S06 – Mo-S10	Room 2-6



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Mon. Aug. 20 <sup>th</sup> 14:00-15:55	Session: Mo-S01 Cuprates SC State-1 Room 2 <i>Chair: Daniel Dessau, Univ. of Colorado Boulder, USA</i>
Invited 14:00-14:20	<b>Collapse of superconductivity in cuprates via ultrafast quenching of phase coherence</b> <i>Andrea Damascelli, Univ. of British Columbia, USA</i>
Invited 14:20-14:40	<b>The attraction between antiferromagnetic quantum vortices as origin of superconductivity in hole-doped cuprates</b> <i>Pieralberto Marchetti, Univ. di Padova, Italia</i>
Invited 14:40-15:00	<b>Unusual superconducting gap in the cuprates: The Raman study on Bi2223</b> <i>Setsuko Tajima, Osaka Univ., Japan</i>
Invited 15:00-15:20	<b>High Temperature Superconductivity in Monolayer Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+δ</sub></b> <i>Yuanbo Zhang, Fudan Univ., China</i>
Invited 15:20-15:40	<b>TBA</b> <i>Alessandra Lanzara, Lawrence Berkeley National Lab, USA</i>
Contributed 15:40-15:55	<b>The Superconducting Phase Diagram of High-T<sub>c</sub> Cuprates</b> <i>Eduardo Marino, Federal Univ. of Rio de Janeiro, Brazil</i>
Mon. Aug. 20 <sup>th</sup> 14:00-15:55	Session: Mo-S02 IBS Topological Room 3 <i>Chair: Joerg Schmalian, Karlsruhe Inst. of Techn., Germany</i>
Invited 14:00-14:20	<b>Stripes and Topological States in FeSe Film</b> <i>Wei Li, Tsinghua Univ., China</i>
Invited 14:20-14:40	<b>High resolution laser-ARPES on topological superconductivity on surface</b> <i>Shik Shin, Univ. of Tokyo, Japan</i>
Invited 14:40-15:00	<b>Topological superconductivity and Majorana bound state in Fe-based superconductors</b> <i>Hong Ding, Inst. of Physics, CAS, China</i>
Invited 15:00-15:20	<b>Topology meets High T<sub>c</sub> Superconductivity in the FeTe<sub>1-x</sub>Se<sub>x</sub> family</b> <i>Peter Johnson, Brookhaven National Lab, USA</i>
Invited 15:20-15:40	<b>Quantum Anomalous Vortex and Majorana Zero Mode in FeTe<sub>1-x</sub>Se<sub>x</sub> Superconductors</b> <i>Ziqiang Wang, Boston College, USA</i>



Contributed 15:40-15:55	<b>Topological Superconductivity on the Surface of Fe-Based Superconductors</b> <i>Gang Xu, Huazhong Univ. of Sci. and Tech., China</i>
<b>Mon. Aug. 20<sup>th</sup> 14:00-15:55</b>	<b>Session: Mo-S03 2D SC</b> <b>Room 4</b> <i>Chair: Lili Wang, Tsinghua Univ., China</i>
Invited 14:00-14:20	<b>Two-dimensional superconductivity in few-layer stanene</b> <i>Ding Zhang, Tsinghua Univ., China</i>
Invited 14:20-14:40	<b>Quantum phase transitions in gate-induced 2D superconductivity</b> <i>Yoshihiro Iwasa, Univ. of Tokyo, Japan</i>
Invited 14:40-15:00	<b>Superconductivity in Topological Semimetals</b> <i>Jian Wang, Peking Univ., China</i>
Invited 15:00-15:20	<b>Superconductivity in Bi/Ni bi-layer system</b> <i>Elisa Baggio-Saitovitch, Centro Brasileiro de Pesq. Fís., Brasil</i>
Invited 15:20-15:40	<b>Coexistence of both Ising and Rashba type spin textures in monolayer NbSe<sub>2</sub></b> <i>Shuyun Zhou, Tsinghua Univ., China</i>
Contributed 15:40-15:55	<b>Unconventional 2D Superconductors: The Out-Of-Equilibrium Response to A Laser Pulse</b> <i>Adolfo Avella, Univ. degli Studi di Salerno, Italy</i>
<b>Mon. Aug. 20<sup>th</sup> 14:00-15:35</b>	<b>Session: Mo-S04 SC-Reduced Symmetry</b> <b>Room 5</b> <i>Chair: Siddharth Saxena, Univ. of Cambridge., UK</i>
Invited 14:00-14:20	<b>Nonreciprocal charge transport in noncentrosymmetric superconductors</b> <i>Naoto Nagaosa, Univ. of Tokyo, Japan</i>
Invited 14:20-14:40	<b>Fit to Superconduct? - Cooper Pairing in Materials with reduced Symmetry</b> <i>Manfred Sgrist, ETH Zurich, Switzerland</i>
Invited 14:40-15:00	<b>Superconductivity with broken time reversal symmetry</b> <i>Huiqiu Yuan, Zhejiang Univ., China</i>
Invited 15:00-15:20	<b>Superconductivity in Weakly Correlated Noncentrosymmetric Systems</b> <i>Ernst Bauer, Technische Univ. Wien, Austria</i>

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<b>Contributed</b> <b>15:20-15:35</b>	<b>Unconventional Superconductivity in noncentrosymmetric superconductors</b> <i>Deepak Singh, ISIS Neutron and Muon Source, UK</i>	
<b>Mon. Aug. 20<sup>th</sup></b> <b>14:00-15:55</b>	<b>Session: Mo-S05 High T<sub>c</sub> Mechanism</b> <i>Chair: Jian-Xin Li, Nanjing Univ., China</i>	<b>Room 6</b>
<b>Invited</b> <b>14:00-14:20</b>	<b>Theoretical Analysis of the Energy-, Momentum- and Temperature-Dependent Quasiparticle Self-Energies in BSCCO Superconductors</b> <i>Bruce Normand, Paul Scherrer Inst., Switzerland</i>	
<b>Invited</b> <b>14:20-14:40</b>	<b>Genes of unconventional high temperature superconductors</b> <i>Jiangping Hu, Inst. of Physics, CAS, China</i>	
<b>Invited</b> <b>14:40-15:00</b>	<b>Mimicking Cupates with Silver and Fluorine</b> <i>José Lorenzana, CNR, Italy</i>	
<b>Invited</b> <b>15:00-15:20</b>	<b>Experimental tests of the AdS-CFT description of cuprate strange metals</b> <i>Mark Golden, Univ. of Amsterdam, Netherlands</i>	
<b>Invited</b> <b>15:20-15:40</b>	<b>Dark Fermion Theory and Ab Initio Studies on Cuprate Superconductors</b> <i>Masatoshi Imada, Univ. of Tokyo, Japan</i>	
<b>Contributed</b> <b>15:40-15:55</b>	<b>Zero Energy States at a Normal--Cuprate-Superconductor Interface Probed by Shot Noise</b> <i>Michael Reznikov, Technion-Israel Inst. of Tech., Israel</i>	
<b>15:55-16:15</b>	<b>Coffee Break 20 minutes</b>	
<b>Mon. Aug. 20<sup>th</sup></b> <b>16:15-18:20</b>	<b>Session: Mo-S06 Cuprates Elec. State-1</b> <i>Chair: Andrea Damascelli, Univ. of British Columbia, USA</i>	<b>Room 2</b>
<b>Invited</b> <b>16:15-16:35</b>	<b>Electronic Self-Energies in Cuprates Beyond EDCs and MDCs – Self-Energy Conversion and Positive Feedback on the Pairing Interactions</b> <i>Daniel Dessau, Univ. of Colorado Boulder, USA</i>	
<b>Invited</b> <b>16:35-16:55</b>	<b>Effects of Reduction Annealing on Electron-Doped Cuprates Revealed by ARPES and Core-Level Spectroscopy</b> <i>Atsushi Fujimori, Univ. of Tokyo, Japan</i>	



Invited 16:55-17:15	<b>Electron Number-Based Phase Diagram of <math>\text{Pr}_{1-x}\text{LaCe}_x\text{CuO}_{4-\delta}</math> and Possible Absence of Disparity between Electron- and Hole-Doped Cuprate Phase Diagrams</b> <i>Changyoung Kim, Seoul National Univ., Korea</i>
Invited 17:15-17:35	<b>From Mott to Not: Dirty d-wave state of overdoped cuprates</b> <i>Peter Hirschfeld, Univ. of Florida, USA</i>
Contributed 17:35-17:50	<b>Direct Observation of Multi-Band Physics in the Cuprate Superconductor <math>\text{La}_{2-x}\text{Sr}_x\text{CuO}_4</math></b> <i>Masafumi Horio, Univ. of Zurich, Switzerland</i>
Contributed 17:50-18:05	<b>Continuous doping of a cuprate surface: new insights from in-situ ARPES</b> <i>Yigui Zhong, Inst. of Physics, CAS, China</i>
Contributed 18:05-18:20	<b>Interplay between AF correlations and PG phase in electron-doped cuprates</b> <i>Marta Zonno, Univ. of British Columbia, Canada</i>
<b>Mon. Aug. 20<sup>th</sup> 16:15-18:15</b>	<b>Session: Mo-S07 IBS 10th Anniversary Room 3</b> <i>Chair: Xianhui Chen, Univ. of Sci. &amp; Techn. of China, China</i>
Invited 16:15-16:35	<b>Two Dome Structure in High <math>T_c</math> Iron-based Superconductors</b> <i>Hideo Hosono, Tokyo Inst. of Techn., Japan</i>
Invited 16:35-16:55	<b>Superconductivity and nematicity in FeSe</b> <i>Andrey Chubukov, Univ. of Minnesota, USA</i>
Invited 16:55-17:15	<b>Interface-Induced Superconductivity at Ambient Pressure in Undoped and Doped (FeAs)<sub>122</sub> Single Crystals</b> <i>Paul C. W. Chu, Univ. of Houston, USA</i>
Invited 17:15-17:35	<b>Electronic phase separation, charge transport and spin nematicity in iron selenide superconductors</b> <i>Xiaoli Dong, Inst. of Physics, CAS, China</i>
Invited 17:35-17:55	<b>Interface Enhanced Superconductivity in Monolayer FeSe on MgO(001)</b> <i>Lili Wang, Tsinghua Univ., China</i>
Invited 17:55-18:15	<b>Exploration of layered superconducting materials via structural design</b> <i>Guanghan Cao, Zhejiang Univ., China</i>



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Mon. Aug. 20 <sup>th</sup> 16:15-18:10		Session: Mo-S08 Devices <i>Chair: Andrew Cleland, Univ. of Chicago, USA</i>	Room 4
Invited 16:15-16:35	Scanning SQUID-on-tip thermal imaging: Glimpse into dissipation in quantum systems down to atomic scale <i>Eli Zeldov, Weizmann Inst. of Science, Israel</i>		
Invited 16:35-16:55	Practical low-T <sub>c</sub> SQUID Systems for Geophysics Applications <i>Xiaoming Xie, SIMIT, CAS, China</i>		
Contributed 16:55-17:10	Near-field Intermodulation Distortion Imaging for Superconducting Device Physics <i>Stephen Remillard, Hope College, USA</i>		
Contributed 17:10-17:25	THz Emitters and Their Applications Using High-T <sub>c</sub> Superconducting Bi-2212 Mesa Structures for High Resolution and High Sensitivity Molecular Spectroscopy <i>Junlan Zhong, Univ. of Tsukuba, Japan</i>		
Contributed 17:25-17:40	In Situ Tailoring of Superconducting Junctions via Electro-Annealing <i>Alejandro Silhanek, Univ. de Liège, Belgium</i>		
Contributed 17:40-17:55	Current-Induced Crossover of Flux Periodicity from $h/2e$ to $h/e$ in Superconducting Nb Nano-Ring <i>Yosef Yeshurun, Bar-Ilan Univ., Israel</i>		
Contributed 17:55-18:10	Aharonov-Bohm type periodic magnetoconductance oscillations in planar and ballistic superconductor-quantum wells Josephson junctions <i>Kaveh Delfanazari, Univ. of Cambridge, UK</i>		
Mon. Aug. 20 <sup>th</sup> 16:15-18:05		Session: Mo-S09 SrTiO <sub>3</sub> & Iridates <i>Chair: Huiqiu Yuan, Zhejiang Univ., China</i>	Room 5
Invited 16:15-16:35	ARPES view of the metal-insulator transitions in Sr <sub>2</sub> IrO <sub>4</sub> and Sr <sub>3</sub> Ir <sub>2</sub> O <sub>7</sub> <i>Veronique Brouet, Univ. Paris Sud - CNRS, France</i>		
Invited 16:35-16:55	Interplay between superconductivity and ferroelectricity in strontium titanate <i>Kamran Behnia, ESPCI, France</i>		



<b>Invited</b> <b>16:55-17:15</b>	<b>Novel Phase Emergence, Superconductivity and Quantum Criticality in Ferroelectric Materials</b> <i>Siddharth Saxena, Univ. of Cambridge, UK</i>
<b>Invited</b> <b>17:15-17:35</b>	<b>Superconductivity in strontium titanate under uniaxial strain near a quantum phase transition</b> <i>Ilya Sochnikov, Univ. of Connecticut, USA</i>
<b>Contributed</b> <b>17:35-17:50</b>	<b>Suppression of weak ferromagnetism in low dimensional OtherSC-SrTiO<sub>3</sub> &amp; Iridates by interfacial engineering of octahedral rotations</b> <i>Yuefeng Nie, Nanjing Univ., China</i>
<b>Contributed</b> <b>17:50-18:05</b>	<b>Superconducting Transition Temperature of 500 mK for La-doped SrTiO<sub>3</sub> Single Crystals with Oxygen Isotope (<sup>18</sup>O) Substitution</b> <i>Yasuhide Tomioka, Advanced Industrial Sci. and Techn., Japan</i>
<b>Mon. Aug. 20<sup>th</sup></b> <b>16:15-17:50</b>	<b>Session: Mo-S10 Mott Physics-1</b> <b>Room 6</b> <i>Chair: Takami Tohyama, Tokyo Univ. of Sci., Japan</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Evolution of the Magnetic and Phonon Excitations in High T<sub>c</sub> Cuprates</b> <i>Yingying Peng, Univ. of Illinois at Urbana-Champaign, USA</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Two-dimensional topological and nodeless superconducting phases emerged from d-wave superconductors in proximity to antiferromagnets</b> <i>Guang-Ming Zhang, Tsinghua Univ., China</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>Anomalous Excitation Spectra and Fractional Excitations in the two-dimensional Mott Insulator</b> <i>Jian-Xin Li, Nanjing Univ., China</i>
<b>Invited</b> <b>17:15-17:35</b>	<b>Novel many-body quantum effect in doped Mott insulators/high-T<sub>c</sub> cuprates</b> <i>Zheng-Yu Weng, Tsinghua Univ., China</i>
<b>Contributed</b> <b>17:35-17:50</b>	<b>Static Spin Susceptibility in Magnetically Ordered States and Coexistent States of Superconductivity and Antiferromagnetism</b> <i>Kazuhiro Kuboki, Kobe Univ., Japan</i>

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## Tuesday, August 21<sup>st</sup>, 2018

Tuesday

08:30-09:10	<b>Plenary 5: Cooperative Interactions as a Route to High Temperature Superconductivity</b> <i>Zhi-Xun Shen, Stanford Univ., USA</i> <i>Chair: Katsuya Shimizu, Osaka Univ., Japan</i>	Room 1
09:10-09:50	<b>Plenary 6: Scattering from High-Temperature Superconductors: New Insights and Perspectives</b> <i>Bernhard Keimer, MPI for Solid State Research, Germany</i> <i>Chair: Katsuya Shimizu, Osaka Univ., Japan</i>	Room 1
09:50-10:10	Coffee Break 20 minutes	
10:10-12:05	Parallel Oral Sessions : Tu-S11 – Tu-S15	Room 2-6
12:05-14:00	Poster Session 2: Experiments-1 / Lunch	
14:00-16:00	Parallel Oral Sessions : Tu-S16 – Tu-S20	Room 2-6
16:00-16:15	Coffee Break 15 minutes	
16:15-18:05	Parallel Oral Sessions : Tu-S21 – Tu-S25	Room 2-6
18:05-18:30	Coffee Break 25 minutes	
18:30-20:00	<b>Prize Award Ceremony</b> <i>Chair: Fuchun Zhang, Univ. of CAS, China</i> <b>John Bardeen Prize 2018</b> <i>Laudatio by Eduardo Fradkin</i> Winners : Andrey V. Chubukov, Igor Mazin, Sebastian Doniach <b>Heike Kamerlingh-Onnes Prize 2018</b> <i>Laudatio by Dirk van der Marel</i> Winners : Yuji Matsuda, Louis Taillefer <b>Bernd T. Matthias Prize 2018</b> <i>Laudatio by Paul C.W. Chu</i> Winner: Katsuya Shimizu	Room 1



Tue. Aug. 21 <sup>st</sup> 10:10-11:50		Session: Tu-S11 Cuprates SC State-2 <i>Chair: Stephen Hayden, Univ. of Bristol, UK</i>	Room 2
Invited 10:10-10:30	<b>The Stiffnessometer - a Magnetic-Field-Free Superconducting Stiffness Meter Reveals Two Critical Temperatures in LSCO</b> <i>Amit Keren, Technion-Israel Inst. of Techn., Israel</i>		
Invited 10:30-10:50	<b>Percolative Superconductivity in the Cuprates</b> <i>Martin Greven, Univ. of Minnesota, USA</i>		
Invited 10:50-11:10	<b>Probing pair-correlations and Coulomb energy of the superconducting state in the high T<sub>c</sub> cuprates</b> <i>Dirk Van der Marel, Univ. of Geneva, Switzerland</i>		
Invited 11:10-11:30	<b>Locating the missing superconducting electrons in overdoped cuprates</b> <i>Peter Armitage, Johns Hopkins Univ., USA</i>		
Invited 11:30-11:50	<b>Antiferromagnetic Spin Gap Limits the Coherent Superconducting Gap in Cuprates</b> <i>John M. Tranquada, Brookhaven National Lab, USA</i>		
Tue. Aug. 21 <sup>st</sup> 10:10-12:00		Session: Tu-S12 IBS Elect. State-1 <i>Chair: Donglai Feng, Fudan Univ., China</i>	Room 3
Invited 10:10-10:30	<b>Laser ARPES on Orbital Origin of Extremely Anisotropic Superconducting Gap in Nematic Phase of FeSe Superconductor</b> <i>Xingjiang Zhou, Inst. of Physics, CAS, China</i>		
Invited 10:30-10:50	<b>ARPES Study of Nematicity in FeSe</b> <i>Donghui Lu, SLAC National Accelerator Lab, USA</i>		
Invited 10:50-11:10	<b>Systematic ARPES of iron-based superconductors as a test for theories</b> <i>Sergey Borisenko, IFW-Dresden, Germany</i>		
Invited 11:10-11:30	<b>Pairing Mechanism of the FeSe-monolayer and related Systems: Phonon Boost Effect and Dynamical Tuning of Pairing Cutoff Energy</b> <i>Yunkyu Bang, Pohang Univ. of Science and Technology, Korea</i>		



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Contributed 11:30-11:45	<b>Extrinsic Photoelectron Energy Losses as the Origin of Replica Bands in Photoemission of FeSe on SrTiO<sub>3</sub></b> <i>Fengmiao Li, Stewart Blusson Quantum Matter Inst., Canada</i>
Contributed 11:45-12:00	<b>Antiferromagnetic Order in Epitaxial FeSe Films on SrTiO<sub>3</sub></b> <i>Dong Qian, Shanghai Jiao Tong Univ., China</i>
<b>Tue. Aug. 21<sup>st</sup> 10:10-11:45</b>	<b>Session: Tu-S13 Topological State-1 Room 4</b> <i>Chair: Jinfeng Jia, Shanghai Jiao Tong Univ., China</i>
Invited 10:10-10:30	<b>Interacting topological superconductor in one dimension</b> <i>Yi Zhou, Zhejiang Univ., China</i>
Invited 10:30-10:50	<b>Topological Nature of the Kondo Insulator SmB<sub>6</sub> – Dependency on the Crystallinity</b> <i>Wan Kyu Park, National High Magnetic Field Lab, USA</i>
Invited 10:50-11:10	<b>Topological superconductivity with spin-3/2 half-heusler compounds beyond spin triplet pairing</b> <i>Congjun Wu, Univ. of California, San Diego, USA</i>
Invited 11:10-11:30	<b>Superconductivity in Topological Materials: Insights from Superconducting Density Functional Theory</b> <i>Ryotaro Arita, Univ. of Tokyo, Japan</i>
Contributed 11:30-11:45	<b>Helical Majorana edge mode in a superconducting antiferromagnetic quantum spin Hall insulator</b> <i>Ching-Kai Chiu, Kavli Inst. for Theoretical Sciences, China</i>
<b>Tue. Aug. 21<sup>st</sup> 10:10-12:05</b>	<b>Session: Tu-S14 Ruthenates Room 5</b> <i>Chair: Kui Jin, Inst. of Physics, CAS, China</i>
Invited 10:10-10:30	<b>Theory of Sr<sub>2</sub>RuO<sub>4</sub>: active/passive bands, spin-orbital coupling and effect of uniaxial and biaxial strains</b> <i>Qiang-Hua Wang, Nanjing Univ., China</i>
Invited 10:30-10:50	<b>Uniaxial Pressure Studies of Unconventional Superconductivity</b> <i>Andrew Mackenzie, MPI for Chem. Phys. of Solids, Germany</i>
Invited 10:50-11:10	<b>Josephson Coupling Enabled Mixed Pairing State in the Eutectic Phase of Ru-Sr<sub>2</sub>RuO<sub>4</sub></b> <i>Ying Liu, Pennsylvania State Univ., USA</i>



Invited 11:10-11:30	Physical Properties of uniaxially strained $\text{Sr}_2\text{RuO}_4$ examined by $^{17}\text{O}$ NMR <i>Stuart Brown, UCLA, USA</i>
Invited 11:30-11:50	Spin-Triplet Superconductivity in the Ruthenate <i>Yoshiteru Maeno, Kyoto Univ., Japan</i>
Contributed 11:50-12:05	The symmetry of the superconducting order parameter of $\text{Sr}_2\text{RuO}_4$ <i>Siham Benhabib, CNRS, France</i>
Tue. Aug. 21 <sup>st</sup> 10:10-11:30	Session: Tu-S15 SC General-Failed SC Room 6 <i>Chair: Eduardo Fradkin, UIUC, USA</i>
Invited 10:10-10:30	The Density and Disorder Tuned Superconductor-Metal Transition in Two Dimensions <i>Harold Hwang, Stanford Univ., USA</i>
Invited 10:30-10:50	Anomalous Metals - Failed Superconductors <i>Steven Kivelson, Stanford Univ., USA</i>
Invited 10:50-11:10	Gauge Theory of the Superconductor-Insulator Transition <i>Valerii Vinokour, Argonne National Lab, USA</i>
Invited 11:10-11:30	Thermal measurements at the SIT <i>Aviad Frydman, Bar Ilan Univ., Israel</i>
12:05-14:00	Poster Session 2: Experiments-1 / Lunch
Tue. Aug. 21 <sup>st</sup> 14:00-16:00	Session: Tu-S16 Loop Current Room 2 <i>Chair: Martin Greven, Univ. of Minnesota, USA</i>
Invited 14:00-14:20	Electronic structure in the pseudogap state of cuprates <i>Chandra Varma, Univ. of California, USA</i>
Invited 14:20-14:40	Singular Density Fluctuations in the Strange Metal Phase of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ <i>Peter Abbamonte, UIUC, USA</i>
Invited 14:40-15:00	Signature of loop currents in superconducting cuprates and Other SC- $\text{SrTiO}_3$ & Iridates <i>Philippe Bourges, CEA, France</i>

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Invited 15:00-15:20	<b>Discovery of slow magnetic fluctuations and critical slowing down in the pseudogap phase of <math>\text{YBa}_2\text{Cu}_3\text{O}_y</math></b> <i>Lei Shu, Fudan Univ., China</i>
Invited 15:20-15:40	<b>No Evidence for Orbital Loop Currents in Charge Ordered <math>\text{YBa}_2\text{Cu}_3\text{O}_{6+x}</math> from Polarized Neutron Diffraction</b> <i>Stephen Hayden, Univ. of Bristol, UK</i>
Invited 15:40-16:00	<b>Microscopic Analysis of ARPES Data in Superconductive State: Intrinsic Self-Energy and Pairing Interaction for Cuprates</b> <i>Han-Yong Choi, Sungkyunkwan Univ., Korea</i>
<b>Tue. Aug. 21<sup>st</sup> 14:00-15:45</b>	<b>Session: Tu-S17      IBS Elect. State-2      Room 3</b> <i>Chair: Hai-Hu Wen, Nanjing Univ., China</i>
Invited 14:00-14:20	<b>Phase Coherence Dominated Superconducting Transition in <math>\text{Fe}_{1+x}(\text{Te},\text{Se})</math></b> <i>Shuheng Pan, Inst. of Physics, CAS, China</i>
Invited 14:20-14:40	<b>Spectroscopic-Imaging STM Studies of Nematicity and Superconductivity in <math>\text{FeSe}_{1-x}\text{S}_x</math></b> <i>Tetsuo Hanaguri, RIKEN, Japan</i>
Invited 14:40-15:00	<b>Tuning superconductivity in <math>\text{NbSe}_2</math> with uniaxial strain</b> <i>Abhay Pasupathy, Columbia Univ., USA</i>
Contributed 15:00-15:15	<b>Ultra-Low Temperature Spectroscopic Imaging Studies of Vortices in the Topological Superconductor <math>\text{FeTe}_{0.6}\text{Se}_{0.4}</math></b> <i>Tadashi Machida, RIKEN, Japan</i>
Contributed 15:15-15:30	<b>Magnetism and the absence of superconductivity in <math>\text{EuFe}_{2-x}\text{Ni}_x\text{As}_2</math> single crystals</b> <i>Zbigniew Bukowski, Inst. of Low Temperature and Structure Research, Polish Academy of Sciences, Poland</i>
Contributed 15:30-15:45	<b>Multigap Superconductivity in <math>\text{RbCa}_2\text{Fe}_4\text{As}_4\text{F}_2</math> Investigated Using <math>\mu\text{SR}</math></b> <i>D.T. Adroja, Rutherford Appleton Laboratory, UK</i>
<b>Tue. Aug. 21<sup>st</sup> 14:00-15:50</b>	<b>Session: Tu-S18      Vortex Matter-1      Room 4</b> <i>Chair: Johann Blatter, ETH Zurich, Switzerland</i>



Invited 14:00-14:20	<b>Extraordinary pinning efficiency of 1D artificial pinning centers with engineered interface in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> nanocomposite films</b> <i>Judy Wu, Univ. of Kansas, USA</i>
Invited 14:20-14:40	<b>Pinscape Spectroscopy: Solving the Inverse Problem in Vortex Pinning</b> <i>Roland Willa, Argonne National Lab, USA</i>
Invited 14:40-15:00	<b>Vortex excitations in the Insulating State of an Oxide Interface</b> <i>Yoram Dagan, Tel Aviv Univ., Israel</i>
Invited 15:00-15:20	<b>Karman vortex streets generated by supercurrent flowing around pinning centers</b> <i>Victor V. Moshchalkov, KU Leuven, Belgium</i>
Contributed 15:20-15:35	<b>Molecular Dynamics Simulation for Melting Transition of Vortex Lattice and Vortex Pinning in a Superconductor</b> <i>Masaru Kato, Osaka Prefecture Univ., Japan</i>
Contributed 15:35-15:50	<b>Structural and Kinematic Studies of Metastable Vortex Lattice Phases in MgB<sub>2</sub></b> <i>Morten Eskildsen, Univ. of Notre Dame, USA</i>
<b>Tue. Aug. 21<sup>st</sup> 14:00-15:50</b>	<b>Session: Tu-S19      New SC Materials-1      Room 5</b> <i>Chair: Jianlin Luo, Inst. of Physics, CAS, China</i>
Invited 14:00-14:20	<b>Magnetic correlations in iron-germanide superconductors</b> <i>Jun Zhao, Fudan Univ., China</i>
Invited 14:20-14:40	<b>The competition between Charge Density Wave and Superconductivity in Pd<sub>x</sub>HoTe<sub>3</sub></b> <i>Shancai Wang, Renmin Univ. of China, China</i>
Invited 14:40-15:00	<b>Recent progress on high throughput superconductivity research</b> <i>Kui Jin, Inst. of Physics, CAS, China</i>
Invited 15:00-15:20	<b>An enlightened search for New Superconductors</b> <i>Ivan Schuller, USCD, USA</i>
Contributed 15:20-15:35	<b>A New Look at an Old Puzzle: ARPES on Ba<sub>1-x</sub>K<sub>x</sub>BiO<sub>3</sub></b> <i>Nicholas Plumb, PSI, Switzerland</i>



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Contributed 15:35-15:50	<b>Structural and Kinematic Studies of Metastable Vortex Themis Z: Opening the New Era for Superconductors</b> <i>Xuan Shen, Thermo Fisher Scientific, China</i>
<b>Tue. Aug. 21<sup>st</sup> 14:00-15:45</b>	<b>Session: Tu-S20 SC General-Nematic States Room 6</b> <i>Chair: Shiliang Li, Inst. of Physics, CAS, China</i>
Invited 14:00-14:20	<b>The So-called Nematic Phase is the Critical Regime of the Orbital/Structural Transition in the Fe-based Superconductors</b> <i>Wei Bao, Renmin Univ. of China, China</i>
Invited 14:20-14:40	<b>Diverse Nematic States and Pairing Mechanisms in Fe-based and Cuprate Superconductors</b> <i>Hiroshi Kontani, Nagoya Univ., Japan</i>
Invited 14:40-15:00	<b>Origin of nematicity in iron-based superconductors</b> <i>Zhiping Yin, Beijing Normal Univ., China</i>
Contributed 15:00-15:15	<b>Orbital fluctuations driven nematic superconductivity: coexistence of orbital polarization and Cooper pairing</b> <i>Liangjian Zou, Inst. of Solid State Physics, CAS, China</i>
Contributed 15:15-15:30	<b>Signatures of fluctuating nematic order in YBCO nanostructures</b> <i>Edoardo Trabello, Chalmers Univ. of Technology, Sweden</i>
Contributed 15:30-15:45	<b>Chirality Fluctuation and Electromagnetic Response in Nematic Superconductors</b> <i>Takeshi Mizushima, Osaka Univ., Japan</i>
16:00-16:15	<b>Coffee Break 15 minutes</b>
<b>Tue. Aug. 21<sup>st</sup> 16:15-18:05</b>	<b>Session: Tu-S21 Cuprates Elect. State-2 Room 2</b> <i>Chair: Han-Yong Choi, Sungkyunkwan Univ., Korea</i>
Invited 16:15-16:35	<b>Electronic structure and electronic order in lightly doped cuprates studied by STM</b> <i>Yayu Wang, Tsinghua Univ., China</i>
Invited 16:35-16:55	<b>Lattice Distortion Induced Effects on Electronic State in Bi-Sr-Ca-Cu-O Superconductors Determined by Scanning Tunneling Microscopy</b> <i>Yi Yin, Zhejiang Univ., China</i>



Invited 16:55-17:15	<b>Conventional aspects of vortex cores in a copper oxide high-<math>T_c</math> superconductor</b> <i>Christoph Renner, Univ. of Geneva, Switzerland</i>
Invited 17:15-17:35	<b>Non-Fermi Liquid Scattering against Emergent Bose Liquid: Manifestations in the Kink and Other Exotic Quasiparticle Behaviors in the Normal-State Cuprate Superconductors</b> <i>Wei Ku, Shanghai Jiao Tong Univ., China</i>
Contributed 17:35-17:50	<b>Electronic State in the Undoped (Ce-free) Superconductor <math>T'</math>-<math>\text{La}_{1.8}\text{Eu}_{0.2}\text{CuO}_4</math> Studied from Impurity Effects on Muon Spin Relaxation</b> <i>Takayuki Kawamata, Tohoku Univ., Japan</i>
Contributed 17:50-18:05	<b>Reduction and Electron-Doping Effects on the Cu-Spin Correlation in Electron-Doped High-<math>T_c</math> Cuprates <math>\text{Pr}_{2-x-y}\text{La}_y\text{Ce}_x\text{CuO}_{4+d}</math></b> <i>Tadashi Adachi, Sophia Univ., Japan</i>
<b>Tue. Aug. 21<sup>st</sup> 16:15-17:55</b>	<b>Session: Tu-S22 IBS-Orbital Room 3</b> <i>Chair: Sergey Borisenko, IFW-Dresden, Germany</i>
Invited 16:15-16:35	<b>Orbital Selective Charge Quadrupole Density Wave in <math>\text{FeSe}_{1-x}\text{S}_x</math> -- Charge Fluctuations in Iron Pnictides and Selenides</b> <i>Girsh Blumberg, Rutgers Univ., USA</i>
Invited 16:35-16:55	<b>In-situ doping control of iron-based superconductors via alkali-metal adsorption</b> <i>Yan Zhang, Peking Univ., China</i>
Invited 16:55-17:15	<b>Electron Correlations and Multi-orbital Superconductivity in Iron Pnictides and Chalcogenides</b> <i>Qimiao Si, Rice Univ., USA</i>
Invited 17:15-17:35	<b>Orbital Selectivity in the nematic and superconducting phases of Iron-based superconductors</b> <i>Laura Fanfarillo, Int. School for Advanced Studies SISSA, Italy</i>
Invited 17:35-17:55	<b>Spectral Evidence for Emergent Order in <math>\text{Ba}_{1-x}\text{Na}_x\text{Fe}_2\text{As}_2</math></b> <i>Ming Yi, UC Berkeley, USA</i>
<b>Tue. Aug. 21<sup>st</sup> 16:15-18:05</b>	<b>Session: Tu-S23 Electrical Applications-1 Room 4</b> <i>Chair: Yanwei Ma, Inst. of Electrical Engineering, China</i>

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Invited 16:15-16:35	<b>Hydrostatic pressure effect on critical current density and vortex dynamics in REBaCuO coated conductors derived by metallorganic deposition</b> <i>Chuanbing Cai, Shanghai Univ., China</i>
Invited 16:35-16:55	<b>Advances in high critical current nanocomposite YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> coated conductors from chemical solutions</b> <i>Xavier Obradors, ICMAB - CSIC, Spain</i>
Invited 16:55-17:15	<b>In-situ hydrostatic pressure induced giant enhancement of superconductivity, flux pinning, and J<sub>c</sub> in Fe-based superconductors and YBCO coated conductors</b> <i>Xiaolin Wang, Inst. for Superconducting &amp; Electronic Materials, Australia</i>
Invited 17:15-17:35	<b>New experiments on the origin of the grain boundary problem in HTS cuprates</b> <i>David Larbalestier, National High Magnetic Field Lab, USA</i>
Contributed 17:35-17:50	<b>High Performance Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>x</sub> Round Wires</b> <i>Jianyi Jiang, National High Magnetic Field Lab, USA</i>
Contributed 17:50-18:05	<b>Recent Progresses on BSCCO Wires and Applications at InnoST</b> <i>Xiuhua Song, Innova Superconductor Techn. Co., Ltd., China</i>
<b>Tue. Aug. 21<sup>st</sup> 16:15-17:50</b>	<b>Session: Tu-S24      New SC Materials-2      Room 5</b> <i>Chair: Liling Sun, Inst. of Physics, CAS, China</i>
Invited 16:15-16:35	<b>Crystal structure and properties of some novel superconductors</b> <i>Xiaolong Chen, Inst. of Physics, CAS, China</i>
Invited 16:35-16:55	<b>Ionic-liquid-gating-assisted protonation: a new route for electron-doping and NMR studies in the iron-based and other superconductors</b> <i>Weiqliang Yu, Renmin Univ. of China, China</i>
Invited 16:55-17:15	<b>Physical and Chemical Properties of Several New Intermetallic Superconductors</b> <i>Robert Cava, Princeton Univ., USA</i>
Invited 17:15-17:35	<b>Superconductivity near structural instabilities</b> <i>Malte Grosche, Univ. of Cambridge, UK</i>



<b>Contributed</b> <b>17:35-17:50</b>	<b>New type of superconductivity produced by electrostatic field and diffusion current in semiconductor</b> <i>Shinichi Ishiguri, Nihon Univ., Japan</i>
<b>Tue. Aug. 21<sup>st</sup></b> <b>16:15-17:30</b>	<b>Session: Tu-S25      SC-Mixed Views      Room 6</b> <i>Chair: Steven Kivelson, Stanford Univ., USA</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Emergent Spacetime Supersymmetry at Superconducting Quantum Criticality of a Single Dirac Cone</b> <i>Hong Yao, Tsinghua Univ., China</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Machine Learning Emergence from Quantum Matter Data</b> <i>Eun-Ah Kim, Cornell Univ., USA</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>The Superconductor-Insulator transition and the Bose-Metal state</b> <i>S. Doniach, Stanford Univ., USA</i>
<b>Contributed</b> <b>17:15-17:30</b>	<b>The Long-Range Singlet Proximity Effect for the Josephson System with Ferromagnet Nanowire</b> <i>Yurii Proshin, Kazan Federal Univ., Russia</i>
<b>18:05-18:30</b>	<b>Break    25 minutes</b>
<b>18:30-20:00</b>	<b>Prize Award Ceremony      Room 1</b> <i>John Bardeen Prize Winner    2018</i> <i>Heike Kamerlingh-Onnes Prize Winner    2018</i> <i>Bernd T. Matthias Prize Winner    2018</i>



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## Wednesday, August 22<sup>nd</sup>, 2018

08:30-09:10	<b>Plenary 7: Discovery and Exploration of the Cuprate Pair Density Wave State</b> <i>J. C. Seamus Davis, Cornell Univ., USA</i> <i>Chair: Andrey Chubukov, Univ. of Minnesota, USA</i>	Room 1
09:10-09:50	<b>Plenary 8: Quantum Criticality and Unconventional Superconductivity in Heavy Fermions</b> <i>Frank Steglich, MPI for Chem. Phys. of Solids, Germany</i> <i>Chair: Andrey Chubukov, Univ. of Minnesota, USA</i>	Room 1
09:50-10:10	Coffee Break 20 minutes	
10:10-12:00	Parallel Oral Sessions : We-S26 – Tu-S30	Room 2-6
12:05-14:00	Poster Session 3: Experiments-2 / Lunch	
14:00-15:45	Parallel Oral Sessions : We-S31 – We-S35	Room 2-6
15:45-16:15	Coffee Break 30 minutes	
16:15-18:10	Parallel Oral Sessions : We-S36 – We-S40	Room 2-6
18:10-19:00	Break 50 minutes	
19:00-21:00	<b>Banquet</b>	Room 1

Wednesday



<b>Wed. Aug. 22<sup>nd</sup></b> <b>10:10-12:00</b>	<b>Session: We-S26 Cuprates Charge Order-1 Room 2</b> <i>Chair: Marc-Henri Julien, Grenoble, France</i>
<b>Invited</b> <b>10:10-10:30</b>	<b>Uniaxial Pressure Control of Competing Orders in a High Temperature Superconductor</b> <i>Matthieu Le Tacon, Karlsruhe Inst. of Techn., Germany</i>
<b>Invited</b> <b>10:30-10:50</b>	<b>Interplay between charge order and superconductivity in cuprate superconductors</b> <i>Shiping Feng, Beijing Normal Univ., China</i>
<b>Invited</b> <b>10:50-11:10</b>	<b>Intertwined order in cuprates and black hole hair</b> <i>Johannes Zaanen, Leiden Univ., Netherlands</i>
<b>Invited</b> <b>11:10-11:30</b>	<b>Theory of Resonant Inelastic X-Ray Scattering in Cuprate Superconductors</b> <i>Takami Tohyama, Tokyo Univ. of Science, Japan</i>
<b>Contributed</b> <b>11:30-11:45</b>	<b>Charge order and scaling between the superfluid density and the critical temperature <math>T_c</math> in cuprate superconductors</b> <i>Evandro De Mello, Univ. Federal Fluminense, Brazil</i>
<b>Contributed</b> <b>11:45-12:00</b>	<b>Dimensional Crossover of Charge-Density Wave Correlations in the Cuprates</b> <i>Dror Orgad, The Hebrew Univ., Israel</i>
<b>Wed. Aug. 22<sup>nd</sup></b> <b>10:10-11:55</b>	<b>Session: We-S27 IBS Elect. State-3 Room 3</b> <i>Chair: Donghui Lu, SLAC National Accelerator Lab, USA</i>
<b>Invited</b> <b>10:10-10:30</b>	<b>Hund's metal compressibility and its correlation with <math>T_c</math> in Iron-based superconductors</b> <i>Luca De Medici, ESPCI, France</i>
<b>Invited</b> <b>10:30-10:50</b>	<b>The electronic structure of 112 iron pnictide superconductors probed by ARPES</b> <i>Ming Shi, PSI, Switzerland</i>
<b>Invited</b> <b>10:50-11:10</b>	<b>Quantum oscillations studies of superconducting <math>\text{FeSe}_{1-x}\text{S}_x</math> tuned by chemical and applied pressure across the nematic phase transition</b> <i>Amalia Coldea, Univ. of Oxford, UK</i>

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Contributed 11:10-11:25	<b>Manifestation of the multiband nature in the BCS-BEC crossover of FeSe<sub>1-x</sub>S<sub>x</sub></b> <i>Takahiro Hashimoto, The Inst. for Solid State Physics, Japan</i>
Contributed 11:25-11:40	<b>Discovery of a strain-stabilized charge density wave in LiFeAs</b> <i>Chi Ming Yim, Univ. of St Andrews, UK</i>
Contributed 11:40-11:55	<b>Fermi Surfaces and Spin Resonances in High-Tc Iron Selenide by Lifshitz Transition</b> <i>Jose Rodriguez, California State Univ. at Los Angeles, USA</i>
<b>Wed. Aug. 22<sup>nd</sup> 10:10-12:00</b>	<b>Session: We-S28 Electrical Applications-2 Room 4</b> <i>Chair: David Larbalestier, Nat. High Magnetic Field Lab, USA</i>
Invited 10:10-10:30	<b>Latest Progress in THEVA's HTS Wire Fabrication and Applications</b> <i>Werner Prusseit, THEVA GmbH, Germany</i>
Invited 10:30-10:50	<b>Recent progress in the development of Fe-based superconducting wires and tapes</b> <i>Yanwei Ma, Inst. of Electrical Engineering, China</i>
Invited 10:50-11:10	<b>Annealing Effect and Superconductivity in FeSe<sub>x</sub>Te<sub>1-x</sub> Superconductors</b> <i>Zhixiang Shi, Southeast Univ., China</i>
Invited 11:10-11:30	<b>Fundamentally Different Behaviors between Superconductor and Conventional Conductor in a Lenz's Law Experiment</b> <i>Ying Xin, Tianjin Univ., China</i>
Contributed 11:30-11:45	<b>In-Plane Anisotropy of the Critical Current in Ba-122 Single Crystals</b> <i>Eisterer Michael, TU Wien, Austria</i>
Contributed 11:45-12:00	<b>Anomalous Enhancement of Critical Current Density due to Novel Planar Defects in CaKFe<sub>4</sub>As<sub>4</sub></b> <i>Tsuyoshi Tamegai, The Univ. of Tokyo, Japan</i>
<b>Wed. Aug. 22<sup>nd</sup> 10:10-11:55</b>	<b>Session: We-S29 Heavy Fermion-1 Room 5</b> <i>Chair: Filip Ronning, Los Alamos National Lab, USA</i>
Invited 10:10-10:30	<b>Revisit of heavy fermion quantum critical superconductivity</b> <i>Yi-feng Yang, Inst. of Physics, CAS, China</i>

Wednesday



<b>Invited</b> <b>10:30-10:50</b>	<b>Superconductivity in YbRh<sub>2</sub>Si<sub>2</sub>: electrical transport and noise experiments</b> <i>John Saunders, Royal Holloway Univ. of London, UK</i>
<b>Invited</b> <b>10:50-11:10</b>	<b>Interplay between Superconductivity and Magnetism in Heavy Fermion Compounds Ce<sub>3</sub>PdIn<sub>11</sub> and Ce<sub>3</sub>PtIn<sub>11</sub></b> <i>Dariusz Kaczorowski, Inst. of Low Temperature and Structure Research, Poland</i>
<b>Contributed</b> <b>11:10-11:25</b>	<b>Attractive superconducting potential due to valence fluctuations in Heavy fermion superconductors</b> <i>Tanmoy Das, Indian Inst. of Science, India</i>
<b>Contributed</b> <b>11:25-11:40</b>	<b>Kohn-Luttinger superconductivity and the Lifshitz transitions in ferromagnetic superconductors: the paradigm of URhGe</b> <i>Joseph Betouras, Loughborough Univ., UK</i>
<b>Contributed</b> <b>11:40-11:55</b>	<b>Ferromagnetic fluctuations and Superconductivity of UCoGe under Pressure</b> <i>Kenji Ishida, Kyoto Univ., Japan</i>
<b>Wed. Aug. 22<sup>nd</sup></b> <b>10:10-11:45</b>	<b>Session: We-S30 SC General-Excited State Room 6</b> <i>Chair: Yasutomo Uemura, Columbia Univ., USA</i>
<b>Invited</b> <b>10:10-10:30</b>	<b>Optical Melting of the Transverse Josephson Plasmon in Bilayer and Trilayer Cuprates</b> <i>Wanzheng Hu, Boston Univ., USA</i>
<b>Invited</b> <b>10:30-10:50</b>	<b>Photo-induced new collective modes and metastable states in cuprate superconductors</b> <i>Nan-Lin Wang, Peking Univ., China</i>
<b>Invited</b> <b>10:50-11:10</b>	<b>Theory of Higgs Spectroscopy of Superconductors in non-equilibrium</b> <i>Dirk Manske, MPI for Solid State Research, Germany</i>
<b>Invited</b> <b>11:10-11:30</b>	<b>TBA</b> <i>Thomas Peter Devereaux, Stanford Univ., USA</i>



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Contributed 11:30-11:45	<b>Tunneling Probe of Fluctuating Superconductivity in Disordered Thin Film</b> <i>Emanuele Dalla Torre, Bar-Ilan Univ., Israel</i>
12:05-14:00	<b>Poster Session 3: Experiments-2 / Lunch</b>
<b>Wed. Aug. 22<sup>nd</sup> 14:00-15:35</b>	<b>Session: We-S31 Cuprates Normal State-1 Room 2</b> <i>Chair: Richard Greene, Univ. of Maryland, USA</i>
Invited 14:00-14:20	<b>Universal T-linear Resistivity and Planckian Limit in Overdoped Cuprates</b> <i>Cyril Proust, LNCMI-Toulouse, France</i>
Invited 14:20-14:40	<b>Phase Diagram of Underdoped Cuprates in a Magnetic Field: A Unified Perspective</b> <i>Dragana Popovic, Florida State Univ., USA</i>
Invited 14:40-15:00	<b>The Essence of the High-<math>T_c</math> Cuprates</b> <i>Neven Barisic, TU Wien, Austria</i>
Invited 15:00-15:20	<b>Using high magnetic fields to reveal critical behavior near optimum doping in high-temperature superconductivity</b> <i>Gregory Boebinger, Nat. High Magnetic Field Lab, USA</i>
Contributed 15:20-15:35	<b>Thermodynamic signatures of quantum criticality in cuprates</b> <i>Bastien Michon, Univ. of Geneva, Switzerland</i>
<b>Wed. Aug. 22<sup>nd</sup> 14:00-15:45</b>	<b>Session: We-S32 IBS Materials-1 Room 3</b> <i>Chair: Tetsuo Hanaguri, RIKEN, Japan</i>
Invited 14:00-14:20	<b>Pressure Induced Reemergence of High-<math>T_c</math> Superconductivity in Heavily Electron Doped FeSe Materials</b> <i>Jinguang Cheng, Inst. of Physics, CAS, China</i>
Invited 14:20-14:40	<b>Discrete superconducting phases in FeSe-derived superconductors</b> <i>Shiyan Li, Fudan Univ., China</i>
Invited 14:40-15:00	<b>Recent Progress in 1144- and 122-type Fe-based Superconductors</b> <i>Akira Iyo, AIST, Japan</i>

Wednesday



Wednesday

Contributed 15:00-15:15	<b>Enhanced anisotropy and transport properties of heavily electron doped <math>\text{Li}_x(\text{NH}_3)_y\text{Fe}_2(\text{Se}, \text{Te})_2</math> single crystals</b> <i>Hechang Lei, Renmin Univ. of China, China</i>
Contributed 15:15-15:30	<b>Electrochemical control of hysteretic current-voltage characteristics in <math>\text{Fe}(\text{Te}, \text{Se})</math> superconductors</b> <i>Yue Sun, Aoyama Gakuin Univ., Japan</i>
Contributed 15:30-15:45	<b>Superconductivity in Akali-Metal- and Organic-Molecule-Intercalated <math>\text{FeSe}</math>: Comparison with Single-Layer <math>\text{FeSe}</math> Films</b> <i>Yoji Koike, Tohoku Univ., Japan</i>
<b>Wed. Aug. 22<sup>nd</sup> 14:00-15:45</b>	<b>Session: We-S33 Vortex Matter-2 Room 4</b> <i>Chair: Yoram Dagan, Tel Aviv Univ., Israel</i>
Invited 14:00-14:20	<b>Scanning probe microscopy of vortices in tilted magnetic fields</b> <i>Hermann Suderow, Univ. Autonoma de Madrid, Spain</i>
Invited 14:20-14:40	<b>Strong Pinning Theory</b> <i>Johann Blatter, ETH Zurich, Switzerland</i>
Invited 14:40-15:00	<b>AC dynamic reorganization and critical phase transition in vortex matter</b> <i>Gabriela Pasquini, Univ. de Buenos Aires, Argentina</i>
Contributed 15:00-15:15	<b>Bose-glass vortex phase in heavy ion irradiated <math>\text{BaK122}</math> iron based superconductors</b> <i>Marcin Konczykowski, CNRS&amp;CEA, France</i>
Contributed 15:15-15:30	<b>Nucleation of Fractional Vortices in a Superconducting Bilayer</b> <i>Taichiro Nishio, Tokyo Univ. of Science, Japan</i>
Contributed 15:30-15:45	<b>Flux Creep in Strong Pinning Theory</b> <i>Vadim Geshkenbein, ETH, Switzerland</i>
<b>Wed. Aug. 22<sup>nd</sup> 14:00-15:30</b>	<b>Session: We-S34 Heavy Fermion-2 Room 5</b> <i>Chair: Yi-feng Yang, Inst. of Physics, CAS, China</i>
Invited 14:00-14:20	<b>Strain effects on superconductivity in <math>\text{CeMIn}_5</math> (<math>\text{M} = \text{Co}, \text{Rh}, \text{Ir}</math>) investigated by thermal expansion</b> <i>Hilbert Von Loehneysen, KIT, Germany</i>

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<b>Invited</b> <b>14:20-14:40</b>	<b>CeRhIn<sub>5</sub> in an Applied Magnetic Field</b> <i>Filip Ronning, Los Alamos National Lab, USA</i>
<b>Invited</b> <b>14:40-15:00</b>	<b>Unidirectional Superconductivity in the Three-dimensional Metal CeIrIn<sub>5</sub></b> <i>Philip Moll, EPFL, Switzerland</i>
<b>Contributed</b> <b>15:00-15:15</b>	<b>Impurity effects on SDW order in FFLO phase of CeCoIn<sub>5</sub></b> <i>Ryusuke Ikeda, Kyoto Univ., Japan</i>
<b>Contributed</b> <b>15:15-15:30</b>	<b>Pressure Dependent Critical Current in Quantum Critical Superconductors</b> <i>Soon-Gil Jung, Sungkyunkwan Univ., Korea</i>
<b>Wed. Aug. 22<sup>nd</sup></b> <b>14:00-15:35</b>	<b>Session: We-S35 Phase Diagram&amp;Transition Room 6</b> <i>Chair: Qimiao Si, Rice Univ., USA</i>
<b>Invited</b> <b>14:00-14:20</b>	<b>Non-Fermi-liquid behaviors and quantum critical points in iron-based superconductors</b> <i>Shiliang Li, Inst. of Physics, CAS, China</i>
<b>Invited</b> <b>14:20-14:40</b>	<b>Phase diagram of unconventional superconductors: common threads revealed by multiple tuning</b> <i>Christos Panagopoulos, Nanyang Techn. Univ., Singapore</i>
<b>Invited</b> <b>14:40-15:00</b>	<b>A Local Quantum Phase Transition in YFe<sub>2</sub>Al<sub>10</sub></b> <i>Meigan Aronson, Texas A&amp;M Univ., USA</i>
<b>Invited</b> <b>15:00-15:20</b>	<b>Magnetic interactions and possible quantum paraelectricity in spin liquid candidate H<sub>3</sub>LiIr<sub>2</sub>O<sub>6</sub></b> <i>Fa Wang, Peking Univ., China</i>
<b>Contributed</b> <b>15:20-15:35</b>	<b>Magnetic (AF SDW) transition in the normal state of iron- and copper-based HTSC</b> <i>Lev Mazov, Inst. for Physics of Microstructures RAS, Russia</i>
<b>15:45-16:15</b>	<b>Coffee Break 30 minutes</b>
<b>Wed. Aug. 22<sup>nd</sup></b> <b>16:15-17:50</b>	<b>Session: We-S36 Cuprates Normal State-2 Room 2</b> <i>Chair: Gregory Boebinger, Nat. High Magnetic Field Lab, USA</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Umklapp scattering as the origin of T-linear resistivity in the normal state of high-T<sub>c</sub> cuprate superconductors</b> <i>Alexei Tsvelik, Brookhaven National Lab, USA</i>

Wednesday



Invited 16:35-16:55	<b>Two fluid model for diamagnetic susceptibility and Nernst effect in high <math>T_c</math> superconductors</b> <i>Qijin Chen, Zhejiang Univ., China</i>
Invited 16:55-17:15	<b>Superconductivity and Competing Phases in High <math>T_c</math> Cuprates</b> <i>Antony Carrington, Univ. of Bristol, UK</i>
Invited 17:15-17:35	<b>Anomalous Transport Properties of Electron-Doped <math>\text{La}_{2-x}\text{Ce}_x\text{CuO}_4</math></b> <i>Richard Greene, Univ. of Maryland, USA</i>
Contributed 17:35-17:50	<b>The c-axis resistance mystery in high temperature superconductor: insights from scanning noise spectroscopy</b> <i>Milan Allan, Leiden Univ., Netherlands</i>
<b>Wed. Aug. 22<sup>nd</sup> 16:15-17:45</b>	<b>Session: We-S37 IBS Dynamics-1 Room 3</b> <i>Chair: Setsuko Tajima, Osaka Univ., Japan</i>
Invited 16:15-16:35	<b>Infrared Study of Antiferromagnetic Correlations and Electron-Phonon Coupling in Hole-Doped Iron Arsenide Superconductors</b> <i>Christian Bernhard, Univ. of Fribourg, Switzerland</i>
Invited 16:35-16:55	<b>Orbital selective physics in iron-based superconductor <math>\text{KFe}_2\text{As}_2</math></b> <i>Xianggang Qiu, Inst. of Physics, CAS, China</i>
Invited 16:55-17:15	<b>Fingerprints of Cooper Pairing in Iron-Based Superconductors</b> <i>Rudolf Hackl, Bayerische Akademie der Wissenschaften, Germany</i>
Contributed 17:15-17:30	<b>Optical properties of the electronic nematic phase in FeSe</b> <i>Leonardo Degiorgi, ETH Zurich, Switzerland</i>
Contributed 17:30-17:45	<b>Ultrafast quasiparticle dynamics and electron-phonon coupling in <math>(\text{Li}_{0.84}\text{Fe}_{0.16})\text{OHFe}_{0.98}\text{Se}</math></b> <i>Jimin Zhao, Inst. of Physics, CAS, China</i>
<b>Wed. Aug. 22<sup>nd</sup> 16:15-18:10</b>	<b>Session: We-S38 Topological State-Nematic Room 4</b> <i>Chair: Ulrich Welp, Argonne National Lab, USA</i>



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<b>Invited</b> <b>16:15-16:35</b>	<b>Topological spin-triplet superconducting states revealed by NMR</b> <i>Guo-qing Zheng, Okayama Univ., Japan</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Evidence of Nematic Superconductivity in Doped Bi<sub>2</sub>Se<sub>3</sub> and Bi<sub>2</sub>Te<sub>3</sub>/FeTeSe Heterostructures</b> <i>Hai-Hu Wen, Nanjing Univ., China</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>Nematic superconductivity in Cu<sub>x</sub>Bi<sub>2</sub>Se<sub>3</sub> studied by scanning tunneling spectroscopy</b> <i>Donglai Feng, Fudan Univ., China</i>
<b>Invited</b> <b>17:15-17:35</b>	<b>Nematic Superconducting Gap in the Topological Superconductor Cu<sub>x</sub>Bi<sub>2</sub>Se<sub>3</sub></b> <i>Shingo Yonezawa, Kyoto Univ., Japan</i>
<b>Invited</b> <b>17:35-17:55</b>	<b>Nematic superconductivity in doped topological insulators</b> <i>Joerg Schmalian, KIT, Germany</i>
<b>Contributed</b> <b>17:55-18:10</b>	<b>Nematic superconductivity in topological materials</b> <i>Antheunis De Visser, Univ. of Amsterdam, Netherlands</i>
<b>Wed. Aug. 22<sup>nd</sup></b> <b>16:15-17:50</b>	<b>Session: We-S39 SC-Light Element Room 5</b> <i>Chair: Zhi-An Ren, Inst. of Physics, CAS, China</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Electron-Phonon Coupling in Compressed H-rich Solids</b> <i>Warren Pickett, Univ. of California Davis, USA</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Raising superconducting transition temperature by lifting the <math>\sigma</math>-bonding bands to the Fermi level</b> <i>Zhong-Yi Lu, Renmin Univ. of China, China</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>Superconductivity and Magnetism in all-Carbon <math>\pi</math>-electron Systems</b> <i>Kosmas Prassides, Tohoku Univ., Japan</i>
<b>Invited</b> <b>17:15-17:35</b>	<b>Formation of High-T<sub>c</sub> Phase of Sulfur Hydride by Low-Temperature Compression</b> <i>Katsuya Shimizu, Osaka Univ., Japan</i>
<b>Contributed</b> <b>17:35-17:50</b>	<b>Potential high-T<sub>c</sub> superconducting ternary hydrides at high pressure</b> <i>Guoying Gao, Yanshan Univ., China</i>

Wednesday



<b>Wed. Aug. 22<sup>nd</sup></b> <b>16:15-17:50</b>	<b>Session: We-S40 SC-Common Features Room 6</b> <i>Chair: Johannes Zaanen, Leiden Univ., Netherlands</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Single-orbital realization of high temperature <math>s\pm</math> superconductivity in the square-octagon lattice</b> <i>Daoxin Yao, Sun Yat-Sen Univ., China</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Molecular orbital approach to electron phonon and pairing interactions in skipped valence and negative charge transfer gap Oxides</b> <i>George Albert Sawatzky, Univ. of British Columbia, Canada</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>Thermodynamics of cuprate, hydride and all superconductors</b> <i>Jeffery Tallon, Victoria Univ. of Wellington, New Zealand</i>
<b>Invited</b> <b>17:15-17:35</b>	<b>Ground-state order in the underdoped region of the 2D Hubbard model</b> <i>Garnet Kin-Lic Chan, Princeton Univ., USA</i>
<b>Contributed</b> <b>17:35-17:50</b>	<b>Wigner Electronic Crystallization as an Example of Local Field Influence on Superconducting Transition</b> <i>Oleg Dolgov, Donostia Int. Physics Center, Spain</i>
<b>18:10-19:00</b>	<b>Break 50 minutes</b>
<b>19:00-21:00</b>	<b>Banquet Room 1</b>

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## Thursday, August 23<sup>rd</sup>, 2018

08:30-09:10	<b>Plenary 9: Magic Angle Graphene: a New Platform for Strongly Correlated Physics</b> <i>Pablo Jarillo-Herrero, MIT, USA</i> <i>Chair: Dirk van der Marel, Univ. of Geneva, Switzerland</i>	Room 1
09:10-09:50	<b>Plenary 10: The Pseudogap Critical Point of Cuprate Superconductors</b> <i>Louis Taillefer, Univ. of Sherbrooke, Canada</i> <i>Chair: Dirk van der Marel, Univ. of Geneva, Switzerland</i>	Room 1
09:50-10:10	Coffee Break 20 minutes	
10:10-12:05	Parallel Oral Sessions : Th-S41 – Th-S45	Room 2-6
12:05-14:00	Poster Session 4: Theories / Lunch	
14:00-15:55	Parallel Oral Sessions : Th-S46 – Th-S50	Room 2-6
15:55-16:15	Coffee Break 20 minutes	
16:15-18:30	Parallel Oral Sessions : Th-S51 – Th-S55	Room 2-6

Thursday



Thu. Aug. 23 <sup>rd</sup> 10:10-11:50	Session: Th-S41 Cuprates Pseudogap Chair: Ting-Kuo Lee, Academia Sinica, Taiwan, China	Room 2
Invited 10:10-10:30	<b>Pairing origin of the pseudogap as observed in ARPES measurement in the underdoped cuprates</b> <i>Tao Li, Renmin Univ. of China, China</i>	
Invited 10:30-10:50	<b>Interplay Between Superconductivity and Pseudogap in Cuprates</b> <i>Bastien Loret, Univ. Paris Diderot, France</i>	
Contributed 10:50-11:05	<b>BCS-like Pseudogap and Novel Isotope Effects in High-T<sub>c</sub> Cuprate Superconductors</b> <i>Safarali Djumanov, Inst. of Nuclear Physics, Uzbekistan</i>	
Contributed 11:05-11:20	<b>In-plane Anisotropy of the Pseudogap Temperature in Underdoped Ultrathin YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub> Thin Films</b> <i>Eric Andersson, Chalmers Univ. of Tech., Sweden</i>	
Contributed 11:20-11:35	<b>Exotic Z<sub>2</sub> Symmetry Breaking Transitions : Theory of Pseudo-gap transitions</b> <i>Eun-Gook Moon, KAIST, Korea</i>	
Contributed 11:35-11:50	<b>Mode-coupling Model of Cuprate Pseudogap: Insights from New First-principles Results</b> <i>Robert Markiewicz, Northeastern Univ., USA</i>	
Thu. Aug. 23 <sup>rd</sup> 10:10-12:00	Session: Th-S42 IBS Nematicity-1 Chair: Rafael Fernandes, Univ. of Minnesota, USA	Room 3
Invited 10:10-10:30	<b>Response of the nematicity and superconductivity of FeSe to in-plane anisotropic strain</b> <i>Clifford Hicks, MPI-CPfS, Germany</i>	
Invited 10:30-10:50	<b>Local orthorhombic lattice distortions in the paramagnetic tetragonal phase of superconducting NaFe<sub>1-x</sub>Ni<sub>x</sub>As</b> <i>Pengcheng Dai, Rice Univ., USA</i>	
Invited 10:50-11:10	<b>Site-selective NMR evidence for spin nematic state in FeSe superconductor</b> <i>Tao Wu, Univ. of Sci. and Tech. of China, China</i>	
Invited 11:10-11:30	<b>Nematic fluctuations and superconductivity in iron-based superconductors</b> <i>Takasada Shibauchi, Univ. of Tokyo, Japan</i>	

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Contributed 11:30-11:45	<b>Evidence of nematic electronic state and nodal superconducting gap along [110] direction in RbFe<sub>2</sub>As<sub>2</sub></b> <i>Tong Zhang, Fudan Univ., China</i>
Contributed 11:45-12:00	<b>Singular magnetic anisotropy in the nematic phase of FeSe</b> <i>Rui Zhou, Inst. of Physics, CAS, China</i>
<b>Thu. Aug. 23<sup>rd</sup> 10:10-12:05</b>	<b>Session: Th-S43 Topological State-Majorana Room 4</b> <i>Chair: Li Lu, Inst. of Physics, CAS, China</i>
Invited 10:10-10:30	<b>Topological superconductor and Majorana fermions in the vortex</b> <i>Jinfeng Jia, Shanghai Jiao Tong Univ., China</i>
Invited 10:30-10:50	<b>Spectroscopic evidence of two distinct chiral topological superconducting phases in a heterostructure of a superconductor and a quantum anomalous Hall insulator</b> <i>Rolf Walter Lortz, Hong Kong Univ. of Sci. &amp; Tech., China</i>
Invited 10:50-11:10	<b>Topological Larkin-Ovchinnikov phase and Majorana zero mode chain in bilayer superconducting topological insulator films</b> <i>Fuchun Zhang, Univ. of CAS, China</i>
Invited 11:10-11:30	<b>Quantization of Chiral Majorana Fermions: Quantum Transport and Interference</b> <i>Qinglin He, Peking Univ., China</i>
Invited 11:30-11:50	<b>Spotting the Elusive Majorana in Atomic Chains Under the Microscope</b> <i>Ali Yazdani, Princeton Univ., USA</i>
Contributed 11:50-12:05	<b>Majorana Multiplexing</b> <i>Yang Peng, California Inst. of Tech., USA</i>
<b>Thu. Aug. 23<sup>rd</sup> 10:10-12:00</b>	<b>Session: Th-S44 SC-Twisted Graphene Room 5</b> <i>Chair: Pablo Jarillo-Herrero, MIT, USA</i>
Invited 10:10-10:30	<b>The nature of correlations in the insulating states of twisted bilayer graphene</b> <i>Leni Bascones, ICMC-CSIC, Spain</i>
Invited 10:30-10:50	<b>Wigner Crystallization in Lieu of Mottness in Twisted bi-layer Graphene</b> <i>Philip Phillips, UIUC, USA</i>

Thursday

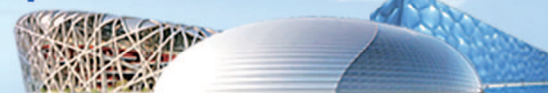




<b>Invited</b> <b>10:50-11:10</b>	<b>Superconducting graphene</b> <i>Takashi Takahashi, Tohoku Univ., Japan</i>
<b>Invited</b> <b>11:10-11:30</b>	<b>Hubbard Model, Unconventional Superconductivity and Density Waves in Twisted Bilayer Graphene</b> <i>Fanqi Yuan, MIT, USA</i>
<b>Contributed</b> <b>11:30-11:45</b>	<b>Chiral SDW and d + id Superconductivity in the Magic-angle Twisted Bilayer-graphene</b> <i>Fan Yang, Beijing Inst. of Tech., China</i>
<b>Contributed</b> <b>11:45-12:00</b>	<b>Effects of Electron-Electron Interactions in Twisted Bilayer Graphene at Magic Angle: Spin-Density-Waves and Conductivity</b> <i>Artem Sboychakov, ITAE, Russia</i>
<b>Thu. Aug. 23<sup>rd</sup></b> <b>10:10-11:45</b>	<b>Session: Th-S45 SC-New Insights Room 6</b> <i>Chair: Shin-ichi Uchida, Univ. of Tokyo, Japan</i>
<b>Invited</b> <b>10:10-10:30</b>	<b>Dynamics of the Meissner Effect: How Superconductors Expel Magnetic Fields</b> <i>Jorge E. Hirsch, Univ. of California, San Diego, USA</i>
<b>Invited</b> <b>10:30-10:50</b>	<b>Recent development in spin superconductor</b> <i>Xin-Cheng Xie, Peking Univ., China</i>
<b>Invited</b> <b>10:50-11:10</b>	<b>Bulk Topological Superconductors, Gap Structure, and Effect of Electron Scattering</b> <i>Ulrich Welp, Argonne National Lab, USA</i>
<b>Invited</b> <b>11:10-11:30</b>	<b>Quasiparticle interference and strong electron-boson coupling in Sr<sub>2</sub>RuO<sub>4</sub></b> <i>Vidya Madhavan, UIUC, USA</i>
<b>Contributed</b> <b>11:30-11:45</b>	<b>Reformulating Supercurrent Generation in Superconductors</b> <i>Hiroyasu Koizumi, Univ. of Tsukuba, Japan</i>
<b>12:05-14:00</b>	<b>Poster Session 4: Theories / Lunch</b>
<b>Thu. Aug. 23<sup>rd</sup></b> <b>14:00-15:50</b>	<b>Session: Th-S46 Cuprates PDW Room 2</b> <i>Chair: Tao Li, Renmin Univ. of China, China</i>
<b>Invited</b> <b>14:00-14:20</b>	<b>Pair density wave as the mother state of the pseudo-gap in Cuprates.</b> <i>Patrick A. Lee, MIT, USA</i>

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Invited 14:20-14:40	<b>Evolution of pair density waves from superconducting to pseudogap phases in copper oxide superconductors</b> <i>Ting-Kuo Lee, Academia Sinica, Taiwan, China</i>
Invited 14:40-15:00	<b>Pair Density Waves and Intertwined Orders in High T<sub>c</sub> Superconductors</b> <i>Eduardo Fradkin, UIUC, USA</i>
Invited 15:00-15:20	<b>Atomic-Scale Andreev Reflection</b> <i>John Wei, Univ. of Toronto, Canada</i>
Contributed 15:20-15:35	<b>Magnetic-field Induced Pair Density Wave State in the Cuprate Vortex Halo</b> <i>Stephen Edkins, Stanford Univ., USA</i>
Contributed 15:35-15:50	<b>Numerical evidence of fluctuating stripes in high-T<sub>c</sub> cuprate superconductors</b> <i>Edwin Huang, Stanford Univ., USA</i>
<b>Thu. Aug. 23<sup>rd</sup> 14:00-15:50</b>	<b>Session: Th-S47 IBS Dynamics-2 Room 3</b> <i>Chair: Pengcheng Dai, Rice Univ., USA</i>
Invited 14:00-14:20	<b>Spin-orbit coupling and preferred magnetic excitations in iron-based superconductors</b> <i>Yuan Li, Peking Univ., China</i>
Invited 14:20-14:40	<b>Spin-space Anisotropy in FeAs Based Superconductors</b> <i>Markus Braden, Univ. of Cologne, Germany</i>
Invited 14:40-15:00	<b>Momentum and Doping Dependence of the Band Renormalization and Scattering Rates in Iron-based Superconductors Determined by ARPES</b> <i>Joerg Fink, IFW, Germany</i>
Invited 15:00-15:20	<b>Theory of Normal State and Superconductivity in Iron Pnictides and Chalcogenides.</b> <i>Gabriel Kotliar, BNL and Rutgers Univ., USA</i>
Contributed 15:20-15:35	<b>Magnetic-field Induced Pair Density Wave State in the Intrinsic Charge Dynamics in High-T<sub>c</sub> AFeAs(O,F) Superconductors</b> <i>Aliaksei Charnukha, IFW Dresden, Germany</i>
Contributed 15:35-15:50	<b>Odd and even modes of neutron spin resonance in CaKFe<sub>4</sub>As<sub>4</sub></b> <i>Huiqian Luo, Inst. of Physics, CAS, China</i>

Thursday



Thu. Aug. 23 <sup>rd</sup> 14:00-15:45		Session: Th-S48    2D SC Interface	Room 4
		Chair: Dragan Mihailovic, Jozef Stefan Inst., Slovenia	
Invited 14:00-14:20	<b>Scanning Tunneling Spectroscopy of Interface Superconductivity</b> <i>Can-Li Song, Tsinghua Univ., China</i>		
Invited 14:20-14:40	<b>Scanning tunneling microscopic observation of the enhancement of <math>T_c</math> and critical field in epitaxial islands grown on <math>\text{SrTiO}_3</math> substrate</b> <i>Minghu Pan, Huazhong Univ. of Sci. and Tech., China</i>		
Invited 14:40-15:00	<b>Superconductivity at the <math>\text{LaAlO}_3/\text{SrTiO}_3</math> interface and related systems</b> <i>Jean-Marc Triscone, Univ. of Geneva, Switzerland</i>		
Contributed 15:00-15:15	<b>Possible Unconventional Superconducting Pairing Mechanism of Two-Dimensional Electron Gas at <math>\text{LaAlO}_3/\text{SrTiO}_3</math> Interface</b> <i>Jiacai Nie, Beijing Normal Univ., China</i>		
Contributed 15:15-15:30	<b>One-Dimensional Nature of Superconductivity at the <math>\text{LaAlO}_3/\text{SrTiO}_3</math> Interface</b> <i>Yun-Yi Pai, Levy Lab, Univ. of Pittsburgh, USA</i>		
Contributed 15:30-15:45	<b>Manipulating electronic structure of novel correlated materials by tailoring superlattices</b> <i>Dawei Shen, SMIT, CAS, China</i>		
Thu. Aug. 23 <sup>rd</sup> 14:00-15:30		Session: Th-S49    New SC Material-3	Room 5
		Chair: Robert Cava, Princeton Univ., USA	
Invited 14:00-14:20	<b>Robust Zero Resistance in Superconducting High Entropy Alloys against Pressure up to 190 GPa</b> <i>Liling Sun, Inst. of Physics, CAS, China</i>		
Invited 14:20-14:40	<b>The Multi-gap Superconductivity, Pressure and Substitution Effect in <math>\text{TiNi}_2(\text{Se},\text{S})_2</math></b> <i>Minghu Fang, Zhejiang Univ., China</i>		
Invited 14:40-15:00	<b>Unconventional Superconductivity and Electronic Correlations in Pr-based "Cage Compounds"</b> <i>Carmen Almasan, Kent State Univ., USA</i>		

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Contributed 15:00-15:15	<b>Superconductivity in Novel Hexagonal BaPtAs with an Ordered Honeycomb Network</b> <i>Kazutaka Kudo, Okayama Univ., Japan</i>
Contributed 15:15-15:30	<b>Stabilization of Sr<sub>3</sub>Al<sub>2</sub>O<sub>6</sub> templates for ex-situ synthesis of superconducting freestanding SrTiO<sub>3</sub> membranes</b> <i>Danfeng Li, Stanford Univ., USA</i>
<b>Thu. Aug. 23<sup>rd</sup> 14:00-15:55</b>	<b>Session: Th-S50 Mott Physics-2 Room 6</b> <i>Chair: Guang-Ming Zhang, Tsinghua Univ., China</i>
Invited 14:00-14:20	<b>Engineering the Mott State of Cuprates for High-Temperature Superconductivity</b> <i>Johan Chang, Univ. of Zurich, Switzerland</i>
Invited 14:20-14:40	<b>Toward a first-principles description of stronger correlations: Stripe and magnetic phases in cupates to topological materials</b> <i>Arun Bansil, Northeastern Univ., USA</i>
Invited 14:40-15:00	<b>Spontaneous symmetry breaking of d-wave superconductivity in t-J model: unbiased finite sizes tensor network studies</b> <i>Yan Chen, Fudan Univ., China</i>
Invited 15:00-15:20	<b>Finite-temperature charge dynamics and the melting of the Mott insulator</b> <i>Tao Xiang, Inst. of Physics, CAS, China</i>
Invited 15:20-15:40	<b>Superconductivity in Doped Mott Insulators From a Dynamical Mean-Field Perspective</b> <i>André-Marie Tremblay, Univ. de Sherbrooke, Canada</i>
Contributed 15:40-15:55	<b>Do all underdoped Mott insulators have a pseudogap in two dimensions?</b> <i>Wei Wu, Ecole Polytechnique, France</i>
15:55-16:15	<b>Coffee Break 20 minutes</b>
<b>Thu. Aug. 23<sup>rd</sup> 16:15-18:25</b>	<b>Session: Th-S51 Cuprates Charge Order-2</b> <i>Chair: Arun Bansil, Northeastern Univ., USA</i>
Invited 16:15-16:35	<b>Commensurate to Incommensurate Transition of the Cuprate CDW</b> <i>Jennifer Hoffman, Harvard Univ., USA</i>

Thursday



<b>Invited</b> <b>16:35-16:55</b>	<b>Spin susceptibility of charge-ordered YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub></b> <i>Marc-Henri Julien, Grenoble, France</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>Charge Density Wave Order and Nematicity in Cuprate Superconductors probed via resonant x-ray scattering.</b> <i>David Hawthorn, Univ. of Waterloo, Canada</i>
<b>Invited</b> <b>17:15-17:35</b>	<b>Study of Charge Dynamics and CDW in high-T<sub>c</sub> cuprates via Resonant Inelastic X-ray Scattering</b> <i>Wei-Sheng Lee, Stanford Univ., USA</i>
<b>Invited</b> <b>17:35-17:55</b>	<b>Spin excitations and charge order in superconducting cuprates studied by resonant inelastic x-ray scattering</b> <i>Giacomo Ghiringhelli, Politecnico di Milano, Italy</i>
<b>Contributed</b> <b>17:55-18:10</b>	<b>Charge-Density-Wave Order and Pseudogap in Single Layered Bi<sub>2</sub>Sr<sub>2-x</sub>La<sub>x</sub>CuO<sub>6+δ</sub> Superconductor</b> <i>Shinji Kawasaki, Okayama Univ., Japan</i>
<b>Contributed</b> <b>18:10-18:25</b>	<b>Universal Phonon Broadening near the Charge Order Q-vector in Bilayer Cuprate Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+y</sub></b> <i>Alex Frano, Univ. of California, San Diego, USA</i>
<b>Thu. Aug. 23<sup>rd</sup></b> <b>16:15-17:55</b>	<b>Session: Th-S52 IBS Material-2</b> <i>Chair: Markus Braden, Univ. of Cologne, Germany</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Intertwined and vestigial electronic phases in hole doped Sr<sub>1-x</sub>Na<sub>x</sub>Fe<sub>2</sub>As<sub>2</sub></b> <i>Christoph Meingast, Karlsruhe Inst. of Tech., Germany</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Intertwined Orders and Magnetic Degeneracy in Iron-Based Superconductors</b> <i>Rafael Fernandes, Univ. of Minnesota, USA</i>
<b>Contributed</b> <b>16:55-17:10</b>	<b>Changing nature of superconductivity in FeS under pressure</b> <i>Harald Jeschke, Okayama Univ., Japan</i>
<b>Contributed</b> <b>17:10-17:25</b>	<b>Microwave Surface Impedance and Complex Conductivity of Ba(Fe<sub>0.926</sub>Co<sub>0.074</sub>)<sub>2</sub>As<sub>2</sub> Single Crystals</b> <i>Mykola Cherpak, O. Usikov Inst. for Radiophysics and Electronics, Ukraine</i>
<b>Contributed</b> <b>17:25-17:40</b>	<b>Frustrated Superconductivity close to the Lifshitz Transition in Ba<sub>1-x</sub>K<sub>x</sub>Fe<sub>2</sub>As<sub>2</sub></b> <i>Vadim Grinenko, TU Dresden, Germany</i>



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Contributed 17:40-17:55	<b>Phase diagram of single-crystalline <math>\text{Eu}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2</math> (<math>0 \leq x \leq 0.24</math>) grown by transition metal arsenide flux</b> <i>Gang Wang, Inst. of Physics, CAS, China</i>
<b>Thu. Aug. 23<sup>rd</sup> 16:15-18:25</b>	<b>Session: Th-S53 Topological State-2</b> <i>Chair: Guo-qing Zheng, Okayama Univ., Japan</i>
Invited 16:15-16:35	<b>Anomalous Magnetic Moments as Evidence of Chiral Superconductivity in Bi/Ni Bilayer</b> <i>Li Lu, Inst. of Physics, CAS, China</i>
Invited 16:35-16:55	<b>Doping-Induced Enhancement of the Superconducting <math>T_c</math> in the Crystalline Topological Insulator Tin Telluride</b> <i>Markus Kriener, Center for Emergent Matter Sci., Japan</i>
Invited 16:55-17:15	<b>Exploring superconductivity in layered topological materials</b> <i>Zhu-An Xu, Zhejiang Univ., China</i>
Invited 17:15-17:35	<b>Rotational Symmetry Breaking in a Trigonal Superconductor Nb-doped <math>\text{Bi}_3\text{Se}_3</math></b> <i>Lu Li, Univ. of Michigan, USA</i>
Invited 17:35-17:55	<b>The fourth superconducting gap: intrinsic Bogoliubov Fermi surfaces</b> <i>Philip Brydon, Univ. of Otago, New Zealand</i>
Contributed 17:55-18:10	<b><math>Z_4</math> Topological Crystalline Superconductivity in UCoGe under pressure</b> <i>Akito Daido, Kyoto Univ., Japan</i>
Contributed 18:10-18:25	<b>Edge currents as a probe of the strongly spin-polarized topological noncentrosymmetric superconductors</b> <i>Alireza Akbari, APCTP, Korea</i>
<b>Thu. Aug. 23<sup>rd</sup> 16:15-17:45</b>	<b>Session: Th-S54 IBS Material-2</b> <i>Chair: Guanghan Cao, Zhejiang Univ., China</i>
Invited 16:15-16:35	<b>Unconventional superconductivity in Cr-based materials</b> <i>Jianlin Luo, Inst. of Physics, CAS, China</i>
Invited 16:35-16:55	<b>Discovery of several new superconductors in Cr/Mo related compounds with quasi-one-dimensional crystal structure</b> <i>Zhi-An Ren, Inst. of Physics, CAS, China</i>

Thursday



<b>Invited</b> <b>16:55-17:15</b>	<b>Possible high-T<sub>c</sub> superconductivity in Ruddlesden-Popper compounds: incipient-narrow bands originating from “hidden-ladders”</b> <i>Kazuhiko Kuroki, Osaka Univ., Japan</i>
<b>Contributed</b> <b>17:15-17:30</b>	<b>Temperature and angular dependence of the upper critical field in K<sub>2</sub>Cr<sub>3</sub>As<sub>3</sub></b> <i>Zengwei Zhu, Huazhong Univ. of Sci. and Tech., China</i>
<b>Contributed</b> <b>17:30-17:45</b>	<b>Ferromagnetic p-wave Superconductors: Progress and Open Questions</b> <i>Jean-Pascal Brison, Univ. Grenoble-Alpes, CEA, France</i>
<b>Thu. Aug. 23<sup>rd</sup></b> <b>16:15-18:00</b>	<b>Session: Th-S55 BCS-BEC Crossover</b> <i>Chair: Qijin Chen, Zhejiang Univ., China</i>
<b>Invited</b> <b>16:15-16:35</b>	<b>Preformed Pairs and BEC-BCS Crossover in Organic superconductors</b> <i>Kazushi Kanoda, Univ. of Tokyo, Japan</i>
<b>Invited</b> <b>16:35-16:55</b>	<b>Thermodynamic studies on iron-chalcogenides Fe(Se,S) in the BCS-BEC crossover</b> <i>Yuta Mizukami, Univ. of Tokyo, Japan</i>
<b>Invited</b> <b>16:55-17:15</b>	<b>Tuning across the BCS-BEC crossover in the multiband superconductor Fe<sub>1+y</sub>Se<sub>x</sub>Te<sub>1-x</sub>: An ARPES study</b> <i>Amit Kanigel, Technion, Israel</i>
<b>Contributed</b> <b>17:15-17:30</b>	<b>Dimensionality-Induced BCS-BEC Crossover</b> <i>Kyosuke Adachi, Kyoto Univ., Japan</i>
<b>Contributed</b> <b>17:30-17:45</b>	<b>Weak Coupling Instability to Finite Momentum Superconductivity in the BCS to BEC Crossover</b> <i>Mats Granath, Univ. of Gothenburg, Sweden</i>
<b>Contributed</b> <b>17:45-18:00</b>	<b>Gate-controlled low carrier density 2D superconductors toward BCS-BEC crossover</b> <i>Yuji Nakagawa, Univ. of Tokyo, Japan</i>

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08:30-10:05	Parallel Oral Sessions : Fr-S56 – Fr-S60	Room 2-6
10:05-10:25	Coffee Break 20 minutes	
10:25-11:05	<b>Plenary 11: Progress on Superconducting Materials for High-Field Application in China</b> <i>Pingxiang Zhang, Northwest Insti. For Non-ferrous Metal Research, China</i> <i>Chair: Nanlin Wang, Peking Univ., China</i>	Room 1
11:05-11:45	<b>Plenary 12: Progress on Quantum Critical Metals</b> <i>Erez Berg, Univ. of Chicago, USA</i> <i>Chair: Nanlin Wang, Peking Univ., China</i>	Room 1
11:45-12:25	<b>Plenary 13: Tunable Superconductivity and Phase Transitions by Field Effect Transistor</b> <i>Xianhui Chen, Univ. of Sci. and Techn. of China, China</i> <i>Chair: Nanlin Wang, Peking Univ., China</i>	Room 1
12:25-12:45	<b>Closing, Best Poster Awards and Next Congress</b> <i>Chair: Xingjiang Zhou, Inst. of Physics, CAS, China</i>	Room 1

Friday



Fri. Aug. 24 <sup>th</sup> 08:30-10:00		Session: Fr-S56    Cuprates Dynamics    Room 2
Chair: Yuan Li,    Peking Univ. , China		
Invited 08:30-08:50	<b>Robust Dynamical Charge Density Waves in High-T<sub>c</sub> Superconducting Cuprates</b> <i>Marco Grilli,    Univ. of Rome 'Sapienza', Italy</i>	
Invited 08:50-09:10	<b>A Non-equilibrium Approach to the Optical Spectroscopy of Cuprates Superconductors</b> <i>Fulvio Parmigiani,    Univ. of Trieste, Italia</i>	
Invited 09:10-09:30	<b>Unconventional high field superconductivity in the underdoped copper-oxide T<sub>c</sub> superconductors</b> <i>Suchitra Sebastian,    Cavendish Lab., UK</i>	
Contributed 09:30-09:45	<b>Scanning noise spectroscopy on a cuprate high temperature superconductor</b> <i>Doohee Cho,    Leiden Univ., Netherlands</i>	
Contributed 09:45-10:00	<b>NMR study of CDW order in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> under hydrostatic pressure</b> <i>Igor Vinograd,    LNCMI, France</i>	
Fri. Aug. 24 <sup>th</sup> 08:30-09:45		Session: Fr-S57    IBS Nematicity-2    Room 3
Chair: Yunkyu Bang,    Pohang Univ.of Sci.and Techn. , Korea		
Invited 08:30-08:50	<b>Orbitals and Nematicity in La-1111 Single Crystals</b> <i>Bernd Kurt Buechner,    IFW Dresden , Germany</i>	
Invited 08:50-09:10	<b>Symmetry-breaking phenomena in iron-based superconductors</b> <i>Kyoko Ishizaka,    Univ.of Tokyo, Japan</i>	
Invited 09:10-09:30	<b>Orbital selectivity and nematicity in iron pnictides and chalcogenides</b> <i>Rong Yu,    Renmin Univ. of China, China</i>	
Contributed 09:30-09:45	<b>Abrupt Change of the Superconducting Gap Structure at the Nematic Critical Point of FeSe<sub>1-x</sub>S<sub>x</sub></b> <i>Shigeru Kasahara,    Kyoto Univ., Japan</i>	

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<b>Fri. Aug. 24<sup>th</sup></b> <b>08:30-10:05</b>	<b>Session: Fr-S58 2D SC TMD</b> <i>Chair: Minghu Fang, Zhejiang Univ. , China</i>	<b>Room 4</b>
<b>Invited</b> <b>08:30-08:50</b>	<b>Theory of the supercyclotron resonance and Hall response in anomalous 2d metals</b> <i>Sean Hartnoll, Stanford Univ. , USA</i>	
<b>Invited</b> <b>08:50-09:10</b>	<b>Unconventional superconducting phases in hole doped two dimensional transition metal dichalcogenides</b> <i>Vivek Aji, Univ. of California Riverside, USA</i>	
<b>Invited</b> <b>09:10-09:30</b>	<b>Mott Jahn-Teller insulating state in single layer 1T-NbSe<sub>2</sub></b> <i>Matteo Calandra, CNRS, France</i>	
<b>Invited</b> <b>09:30-09:50</b>	<b>Chiral and disordered polaron textures, metastability and carrier duality in systems with competing orders</b> <i>Dragan Mihailovic, Jozef Stefan Inst., Slovenia</i>	
<b>Contributed</b> <b>09:50-10:05</b>	<b>Transport study of superconducting-normal (SN) junctions at the surface of ionic gated MoS<sub>2</sub></b> <i>Qihong Chen, Univ. of Groningen, Netherlands</i>	
<b>Fri. Aug. 24<sup>th</sup></b> <b>08:30-10:00</b>	<b>Session: Fr-S59 SC-organic</b> <i>Chair: Yan Chen, Fudan Univ.,China</i>	<b>Room 5</b>
<b>Invited</b> <b>08:30-08:50</b>	<b>Orbital Degeneracy, Mott-Jahn-Teller Insulators, and Strongly Correlated Superconductivity in Molecular Conductors, especially Fullerides</b> <i>Erio Tosatti, SISSA &amp; ICTP, Italy</i>	
<b>Invited</b> <b>08:50-09:10</b>	<b>Crossover from impurity-controlled to granular superconductivity in (TMTSF)<sub>2</sub>ClO<sub>4</sub></b> <i>Claire Marrache-Kikuchi, Paris-Sud Univ., France</i>	
<b>Invited</b> <b>09:10-09:30</b>	<b>Discovery of superconductivity in poly-p-phenylene oligomers</b> <i>Xiaojia Chen, HPSTAR, China</i>	
<b>Contributed</b> <b>09:30-09:45</b>	<b>Confined Superconductivity and Ferromagnetism in Boron Doped Diamond</b> <i>Tomas Samuely, P. J. Safarik Univ.in Kosice, Slovakia</i>	

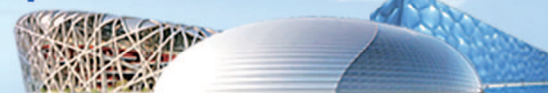
Friday





Contributed 09:45-10:00	Interplay between electron-phonon and electron-electron interactions in electron doped aromatic carbon materials viewed from electrical transport probe <i>Katsumi Tanigaki, AIMR - Tohoku Univ., Japan</i>	
Fri. Aug. 24 <sup>th</sup> 08:30-09:50	<b>Session: Fr-S60 New Developments</b> <i>Chair: Johan Chang, Univ. of Zurich, Switzerland</i>	<b>Room 6</b>
Invited 08:30-08:50	<b>New Superconductors Tuned at High Pressures</b> <i>Changqing Jin, Inst. of Physics, CAS, China</i>	
Invited 08:50-09:10	<b>Discovery of a New Cuprate with Unusual Features: Significance for High-T<sub>c</sub> Physics</b> <i>Shin-ichi Uchida, Univ. of Tokyo, Japan</i>	
Invited 09:10-09:30	<b>Onset of the photo-excited transient superconductivity and Nernst effect at the emergence of local phase coherence of preformed pairs</b> <i>Yasutomo Uemura, Columbia Univ., USA</i>	
Invited 09:30-09:50	<b>Direct observation of symmetry-distinct states with nontrivial doping evolution in a high-T<sub>c</sub> cuprate family by polarization-dependent angle-resolved photoemission</b> <i>Ruihua He, Westlake Inst. for Advanced Study, China</i>	
10:05-10:25	<b>Coffee Break 20 minutes</b>	
10:25-12:25	<b>Plenary 11, Plenary 12, Plenary 13</b>	<b>Room 1</b>
12:25-12:45	<b>Closing and Best Poster Awards and Next Congress</b>	<b>Room 1</b>

Friday



### 8.3 Poster Session

<b>Monday Aug. 20<sup>th</sup> 12:05-14:00</b> <b>Poster Session 1: Materials &amp; Applications</b> <i>Chair: Xianhui Chen, Univ. of Sci. &amp; Techn. of China, China</i>		
<b>Mo-1</b>	Tomasz Klimczuk	Crystal growth and superconductivity in CaBi <sub>2</sub>
<b>Mo-2</b>	Guo-Yi Zhu	Inter-valley chiral topological superconductivity in a graphene Moire superlattice
<b>Mo-3</b>	Jarosław Juraszek	Multiband effects in the filled skutterudites superconductors PrOs <sub>4</sub> Sb <sub>12</sub> and LaRu <sub>4</sub> As <sub>12</sub> probed by measurement of the lower critical field
<b>Mo-4</b>	Su-young Kim	Transport and Calorimetry Study of 20% La-doped CeIn <sub>3</sub>
<b>Mo-5</b>	Lei Qiao	Ce <sub>2</sub> O <sub>2</sub> Bi: A New Heavy Fermion Compound with Topological Bismuth-Square Net
<b>Mo-6</b>	Wenhao Liu	Magnetization of Potassium Doped p-terphenyl and p-quaterphenyl by High Pressure Synthesis
<b>Mo-7</b>	Albert Guijarro	On the Characterization of the Main Phase in Kxp-terphenyl Systems
<b>Mo-8</b>	Tae-Ho Park	Superconductivity in K doped p-terphenyl : First principles calculations of electron-phonon coupling
<b>Mo-9</b>	Jose Antonio Verges	Stable Structural Phases of Potassium p-Terphenyl Compounds
<b>Mo-10</b>	Shin-Ming Huang	Prediction of quasi-one-dimensional topological superconductor Tl <sub>2-x</sub> Mo <sub>6</sub> Se <sub>6</sub>
<b>Mo-11</b>	Haiming Deng	Paramagnetic Resonances in Surface-Superconducting Topological Insulator Sb <sub>2</sub> Te <sub>3</sub>
<b>Mo-12</b>	Jie Zhang	Superconducting proximity effect in Bi <sub>2</sub> Se <sub>3</sub> /FeSe heterojunction films grown by RF magnetron sputtering
<b>Mo-13</b>	Beilun Wu	Upper critical field study in ferromagnetic superconductor UCoGe
<b>Mo-14</b>	Hirohito Aizawa	Electronic Band Structure and Superconducting Gap Symmetry in Organic Conductor λ-(BETS) <sub>2</sub> GaCl <sub>4</sub>



<b>Mo-15</b>	Xinwei Cai	High Performance MgB <sub>2</sub> Wires by in situ Powder-in-Tube Process with Mg(BH <sub>4</sub> ) <sub>2</sub>
<b>Mo-16</b>	Chao Zhang	Griffiths Singularity of Superconductor-Insulator Transition in TiO Epitaxial Thin Films with Different Thicknesses
<b>Mo-17</b>	Yanwu Xie	High-temperature interface superconductivity in bilayer films grown by pulsed laser deposition
<b>Mo-18</b>	Ildar Abdyukhanov	Development and Research of HTS Materials in SC “Bochvar Institute”
<b>Mo-19</b>	Lihua Jin	Improved Structure and Superconducting Properties of YBCO Films with Nanoparticles Derived from Chemical Solution Deposition
<b>Mo-20</b>	Riccardo Arpaia	Robust Dynamical Charge Density Waves in (Y,Nd)Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub>
<b>Mo-21</b>	Yue Zhang	Unprecedented High Irreversibility Line in Nontoxic Cuprate Superconductor (Cu,C)Ba <sub>2</sub> Ca <sub>3</sub> Cu <sub>4</sub> O <sub>11+δ</sub>
<b>Mo-22</b>	Andrea Augieri	Synchrotron X-ray diffraction study of structural disorder in YBCO and composite YBCO films
<b>Mo-23</b>	Wei Hu	The two-gap feature in optimal electron-doped cuprates
<b>Mo-24</b>	Xiaoqing Zhou	Observation of Topological Surface State in High Temperature Superconductor MgB <sub>2</sub>
<b>Mo-25</b>	Chuan Li	4πi- periodic Andreev bound states in a Dirac semimetal
<b>Mo-26</b>	Takuto Kawakami	Superconductivity in spin 3/2 topological insulators with carrier doping
<b>Mo-27</b>	Masanori Ichioka	D-vector Dependence of Local NMR Relaxation Rates T <sub>1</sub> <sup>-1</sup> and T <sub>2</sub> <sup>-1</sup> in the Vortex State of Chiral and Helical P-wave Superconductors
<b>Mo-28</b>	Guoqing Liu	Preparation of Bi-2212 high temperature superconductors with different precursor powders
<b>Mo-29</b>	Shusei Mizuta	STM/STS Study on Electronic Superstructures in High-T <sub>c</sub> Cuprate Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+x</sub>
<b>Mo-30</b>	Matteo Rossi	Incident-Energy Dependence of Lattice and Magnetic Excitations of NdBa <sub>2</sub> Cu <sub>3</sub> O <sub>6</sub> Measured by Resonant Inelastic X-Ray Scattering



<b>Mo-31</b>	Linfei Liu	Comparison of BaZrO <sub>3</sub> and BaHfO <sub>3</sub> dopants on the properties of YGBCO superconducting films grown by PLD
<b>Mo-32</b>	Ke Zhao	Co-existence of ferromagnetism and superconductivity in Bi <sub>2</sub> Se <sub>3</sub> -doped FeSe
<b>Mo-33</b>	Genki Kuwano	Effects of Cross-Section Profiles on Synchronization of Distributed Intrinsic Josephson Junctions in Cuprate High-T <sub>c</sub> Superconductors for Coherent Terahertz Radiation
<b>Mo-34</b>	Jianxi Lan	Comparison of I <sub>c</sub> variations between coated conductor and Bi-2223 samples at different temperatures and magnetic fields
<b>Mo-35</b>	Yoh Kohori	<sup>63,65</sup> Cu NMR studies of superconducting T'-La <sub>1.8</sub> Eu <sub>0.2</sub> Cu <sub>4+δ</sub> with Nd <sub>2</sub> CuO <sub>4</sub> structure
<b>Mo-36</b>	Ho Keun Lee	Tuning of the Superconductivity above 100 K in TlSr <sub>2</sub> CaCu <sub>2</sub> O <sub>7</sub> by Cation Substitutions
<b>Mo-37</b>	Kevin Kramer	Comprehensive Band Structure Study of Single-layer Cuprate Superconductors
<b>Mo-38</b>	Toshihiko Maeda	Phase Formation and Superconductivity in (Nb,Sn)Sr <sub>2</sub> RECu <sub>2</sub> O <sub>z</sub> (RE: rare-earth element, z≈8)
<b>Mo-39</b>	Iijun cui	Preparation and Characterization of Bi-2223 Precursor Powder by Spray Pyrolysis Method
<b>Mo-41</b>	Manabu Tsujimoto	Design and Characterization of Microstrip Patch Antennas for Efficient Terahertz Radiation from BSCCO Intrinsic Josephson Junctions
<b>Mo-42</b>	Ziliang Li	Chemical Solution Derived YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> Nanocomposite Films with Preformed BaMO <sub>3</sub> (M=Zr, Hf) Nanoparticles for Enhanced Superconducting Performances
<b>Mo-43</b>	Fang Li	Stresses and superconducting properties of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> /(La,Sr)(Al,Ta)O <sub>3</sub> , YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> /LaAlO <sub>3</sub> and YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> /SrTiO <sub>3</sub> thin films
<b>Mo-44</b>	Rolf Walter Lortz	Thermodynamic evidence for a Fulde-Ferrell-Larkin-Ovchinnikov state in the iron-based superconductor KFe <sub>2</sub> As <sub>2</sub>
<b>Mo-45</b>	Zhongtang Xu	Transport Properties and Pinning Analysis for Co-doped BaFe <sub>2</sub> As <sub>2</sub> Thin Films on Metal Tapes and Single Crystal Substrates



<b>Mo-46</b>	Wolfgang Stefan-Ludwig Drechsler	Electron-electron interaction, mass enhancement, band shifts and VAN HOVE singularities in hole overdoped $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ and $\text{CsFe}_2\text{As}_2$ superconductors
<b>Mo-47</b>	Kyungwan Kim	Nematic and Magnetic Fluctuations in $\text{Ba}(\text{Fe},\text{Co})_2\text{As}_2$
<b>Mo-48</b>	Kosuke Nakayama	High-Resolution ARPES study of One-Monolayer FeSe Films on $\text{SrTiO}_3$ : Dirac Semimetal and High-Temperature Superconducting Phases
<b>Mo-49</b>	Jixing Liu	Enhanced critical current density of $\text{Fe}(\text{Se}, \text{Te})$ superconducting bulks by Fluorine doping
<b>Mo-50</b>	Koshin Shigekawa	Superconducting Quasiparticles in Electron-Doped FeSe Thin Films Studied by High-Resolution ARPES
<b>Mo-51</b>	Kenji Kawashima	Superconducting properties of $(\text{La},\text{Na})\text{AFe}_4\text{As}_4$ ( $\text{A} = \text{Rb}, \text{Cs}$ ) with 1144-type structure
<b>Mo-52</b>	Jia Yu	Characterization of the Single Crystalline Iron-based 112-type Parent Compound $\text{EuFeAs}_2$
<b>Mo-53</b>	Naoki Murai	Effect of electron correlations on spin excitation bandwidth in $\text{Ba}_{0.75}\text{K}_{0.25}\text{Fe}_2\text{As}_2$ as seen via time-of-flight inelastic neutron scattering
<b>Mo-54</b>	Zhe Cheng	Effect of wire diameter on the microstructure and $J_c$ properties of $\text{Ba}_{0.6}\text{K}_{0.4}\text{Fe}_2\text{As}_2$ tapes
<b>Mo-55</b>	Evgeniia Sheveleva	Magnetic and Superconducting Properties of the Iron Arsenide Pnictides $\text{Ba}_{1-x}\text{Na}_x\text{Fe}_2\text{As}_2$ as seen by Infrared Spectroscopy and Muon Spin Rotation
<b>Mo-56</b>	Huaxue Zhou	$(\text{Li},\text{Fe})\text{OHFeSe}$ Superconductor: Ion-exchange Synthesis of Large Single Crystal and Mn Substitution
<b>Mo-57</b>	Ivan Veshchunov	Magnetic Flux Structure in Phosphorus-Doped $\text{EuFe}_2\text{As}_2$ Single Crystals
<b>Mo-58</b>	Ruijin Sun	Doping induced insulate transition in Superconductor $\text{Ba}_x(\text{NH}_3)_y\text{Fe}_{2-z}\text{S}_2$
<b>Mo-59</b>	He Huang	Record Critical Current Density with Low Anisotropy in Highly-Textured 122 Iron-based Superconducting Tapes
<b>Mo-60</b>	Yanchang Zhu	Fabrication of superconducting joint between iron-based superconductor tapes



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<b>Mo-61</b>	Shifa Liu	High Critical Current Density in Cu/Ag Compositized Sheathed $\text{Ba}_{0.6}\text{K}_{0.4}\text{Fe}_2\text{As}_2$ Tapes via Hot Isostatic Pressing
<b>Mo-62</b>	Shifeng Jin	Structure and properties of new organic molecule intercalated FeSe superconductors
<b>Mo-63</b>	Fuyuki Nabeshima	Growth and Transport Properties of Fe(Se,S) thin films
<b>Mo-64</b>	Xiao Fan	Nematicity and high temperature superconductivity in an orthorhombic iron-based superconductor $\text{Na}_{0.35}(\text{C}_3\text{N}_2\text{H}_{10})_{0.426}\text{Fe}_2\text{Se}_2$
<b>Mo-65</b>	Zhongpei Feng	High throughput research to elucidate tunable superconductivity in FeSe
<b>Mo-66</b>	Wei Wu	Multiple magnetic transitions in single crystal $\text{Ce}_{12}\text{Fe}_{57.5}\text{As}_{41}$ and $\text{La}_{12}\text{Fe}_{57.5}\text{As}_{41}$
<b>Mo-67</b>	Linlin Zhao	The Superconducting Phase Diagram in $\text{Li}_x(\text{C}_2\text{H}_8\text{N}_2)_y\text{Fe}_2\text{Se}_2$
<b>Mo-69</b>	Michal Babij	Search for Superconductivity in $\text{Ni}^{2+}$ Doped $\text{EuFe}_2\text{As}_2$ at High Pressure
<b>Mo-70</b>	Kazuki Sato	New Alkaline-Earth-Metal- and Ethylenediamine-Intercalated FeSe-Based and $\text{MoSe}_2$ -Based Superconductors
<b>Mo-71</b>	Tong Lin	Optical spectroscopy study of iron-based superconductor (Li,Fe)OHFeSe
<b>Mo-72</b>	Guanyu Chen	Highly Anisotropic Superconducting Gaps and BCS-like Critical Fluctuation in FeSe Single Crystal
<b>Mo-73</b>	Hai Lin	Multiband Superconductivity and Large Anisotropy in FeS Crystals
<b>Mo-74</b>	Xiaoming Ma	Superconductivity and Magnetism Study of Ruthenium-doped Iron Chalcogenides
<b>Mo-75</b>	Yulong Huang	Superconducting (Li,Fe)OHFeSe Film of High Quality and High Critical Parameters
<b>Mo-76</b>	Zhi-Cheng Wang	Transport properties and anisotropy of $\text{CsCa}_2\text{Fe}_4\text{As}_4\text{F}_2$ single crystals
<b>Mo-77</b>	Mengzhu Shi	Organic ion intercalated FeSe-based superconductors
<b>Mo-78</b>	Tianfeng Duan	Collective Vortex Pinning and Merging of the Irreversibility Line and Second Peak Effect in Optimally Doped $\text{Ba}_{1-x}\text{K}_x\text{BiO}_3$ Single Crystals



<b>Mo-79</b>	Xiyu Zhu	Structures and Physical Properties of $\text{CsV}_2\text{Se}_{2-x}\text{O}$ and $\text{V}_2\text{Se}_2\text{O}$
<b>Mo-80</b>	Wenhao Luo	Changed structure and properties of $\text{MgB}_2$ bulk superconductors with $\text{Mg}(\text{BH}_4)_2$ additions
<b>Mo-81</b>	Wanling Liu	Tailoring charge transfer and magnetism at interfaces of spin-orbit coupled oxide superlattices
<b>Mo-82</b>	Dongliang Gong	Coexistence and Competition between stripe and Neel antiferromagnetic order in highly Cr doped $\text{BaFe}_{1.9-x}\text{Ni}_{0.1}\text{Cr}_x\text{As}_2$
<b>Mo-83</b>	Miao Meng	Structural and Transport Properties of FeTe Films
<b>Mo-84</b>	Chenguang Mei	High Quality Superconducting $\text{FeSe}_{0.5}\text{Te}_{0.5}$ Films Grown on $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})_{0.7}\text{Ti}_{0.3}\text{O}_3$ with Large Lattice Mismatch and Electric-field Modulation of Superconducting Transition
<b>Mo-85</b>	Yi Cui	Optimized Conditions for ionic-liquid-gating assisted protonation to search for high- $T_c$ phases in iron-based superconductors
<b>Mo-86</b>	Shengnan Zhang	Fabrication of FeSe superconducting wires based on high-energy ball milling aided sintering process
<b>Mo-88</b>	Yu Dong	Anomalous transversal resistance in 122-type iron-based superconductors
<b>Mo-89</b>	Gang Mu	Growth and Physical Properties of $\text{CaFeAsF}$ Single Crystals
<b>Mo-90</b>	Zhengtai Liu	Electron-plasmon interaction induced plasmonic-polaron band replication in epitaxial perovskite $\text{SrIrO}_3$ films
<b>Mo-91</b>	Hong Zhang	Improved superconductivity by increasing density of $\text{MgB}_2$ prepared by hot-pressing
<b>Mo-92</b>	Qi Wang	The Effect of Sintering Temperature on Superconductivity of $\text{MgB}_2$ Prepared by Hot-pressing
<b>Mo-93</b>	Evgeny Mazur	Metallic hydrogen with a strong electron-phonon interaction at a pressure of 300-500 GPa
<b>Mo-94</b>	Agustin Conde-Gallardo	Temperature Dependence of the 182-, 201-, 210- and 285- $\text{cm}^{-1}$ Raman modes of the $\text{SmFeAsO}_{1-x}\text{F}_x$ superconducting compounds
<b>Mo-95</b>	Salvatore Licciardello	Electrical resistivity across a nematic quantum critical point

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<b>Mo-96</b>	Eduardo M. Bittar	Superconducting $\text{La}_3\text{Co}_4\text{Sn}_{13}$ Compound Under Pressure
<b>Mo-97</b>	Jian Zhang	Time-reversal symmetry breaking superconductivity in $(\text{Pr},\text{La})\text{Pt}_4\text{Ge}_{12}$
<b>Mo-98</b>	Yeting Shao	Enhanced Superconductivity in O Doped $\text{ThNiAsN}$
<b>Mo-99</b>	Yunjie Fan	Effect of Oxygen Content on the Superconductivity of Titanium Monoxide Films
<b>Mo-100</b>	Huixia Luo	S-shaped suppression of the superconducting transition temperature in $\text{Cu}_x\text{NbSe}_2$
<b>Mo-101</b>	Jian-gang Guo	2D Superconductivity from Dimerization of Atomically Ordered $\text{AuTe}_2\text{Se}_{4/3}$ Cubes
<b>Mo-102</b>	Qing-Ge Mu	Superconductivity Beyond 10 K in the Novel Quasi-one-dimensional Ternary Molybdenum Pnictides $\text{A}_2\text{Mo}_3\text{As}_3$ (A=K, Rb, Cs)
<b>Mo-103</b>	Vinh Hung Tran	Electronic properties of the noncentrosymmetric superconductor $\text{Th}_7\text{Fe}_3$
<b>Mo-104</b>	Fang Cheng	Improved Superconducting Properties in the $\text{Mg}^{11}\text{B}_2$ Low Activation Superconductor Prepared by Optimizing Microstructure
<b>Mo-105</b>	Jian Peng	Superconductivity and valence state in layered single-crystal $\text{HfAs}_{1.67}\text{Te}_{0.12}$
<b>Mo-106</b>	Yanpeng Qi	Superconductivity in alkaline earth metal-filled skutterudites $\text{Ba}_x\text{Ir}_4\text{X}_{12}$ (X = As, P)
<b>Mo-107</b>	Dan Xi	Superconducting and Mechanical Properties of 18-filament $\text{MgB}_2$ Long Wire Prepared by in-situ Method
<b>Mo-108</b>	Takashi Kambe	Electrochemical Li-intercalation to $\text{KSr}_2\text{Nb}_3\text{O}_{10}$ and $\text{NaSr}_2\text{Nb}_3\text{O}_{10}$
<b>Mo-109</b>	Qiang Guo	Study on High $J_c$ and Low AC Losses $\text{NbTi}/\text{Cu}_{0.5}\text{Mn}$ Superconducting Wire for HIAF Magnets
<b>Mo-110</b>	Gareoung Kim	Superconductivity properties of $\text{Ta}_{1/6}\text{Nb}_{2/6}\text{Hf}_{1/6}\text{Zr}_{1/6}\text{Ti}_{1/6}$ high entropy alloy
<b>Mo-111</b>	Pierre Bonnet	Superconducting Silicon Resonators
<b>Mo-112</b>	Jianjun Ying	Fermi surface reconstruction in $2\text{H-TaSe}_2$ under high pressure mediated by interlayer interaction



<b>Mo-113</b>	Katsuhiro Suzuki	A possibility of anisotropic s-wave pairing in BiS <sub>2</sub> layered superconductors
<b>Mo-114</b>	Zhi Ren	Possible unconventional superconductivity in SnSb with natural superlattice structure
<b>Mo-115</b>	Hua Bai	Superconductivity in misfit layered compound (SnSe) <sub>1.16</sub> (NbSe <sub>2</sub> )
<b>Mo-116</b>	Xiang Liu	Possibly Better Superconductivity at Domain Boundaries in Two-Dimensional $\alpha$ -Mo <sub>2</sub> C Crystals
<b>Mo-117</b>	Ryota Sogabe	BiS <sub>2</sub> -based layered superconductors with high-entropy-alloy-type blocking layers
<b>Mo-118</b>	Ke Zhang	Performance Improvements to Bronze Processed Nb <sub>3</sub> Sn Strands
<b>Mo-119</b>	Qing-Ge Mu	Superconductivity in several Quasi-one-dimensional Ternary chromium Pnictide compounds
<b>Mo-120</b>	Chang-geun Oh	Time-Dependent Reentrant Superconductivity in the Nonequilibrium state of KBi <sub>2</sub>
<b>Mo-121</b>	Yuki Saito	Discovery of Superconductivity in BaPtSb with a Noncentrosymmetric Structure
<b>Mo-122</b>	Guobao Li	Superconductivity in Perovskite Ba <sub>1-x</sub> Ln <sub>x</sub> (Bi <sub>0.20</sub> Pb <sub>0.80</sub> )O <sub>3-<math>\delta</math></sub> (Ln= Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu)
<b>Mo-123</b>	Xiao Lin	A Ferroelectric Quantum Phase Transition Inside the Superconducting Dome of Sr <sub>1-x</sub> Ca <sub>x</sub> TiO <sub>3-<math>\delta</math></sub>
<b>Mo-124</b>	Sandra Karlsson	New Superconducting Phases in the Nb-Pd-(Se/S) System
<b>Mo-125</b>	Yury Karasev	The Superconducting NbTi Wire for Coils of the Superconducting Dipole Magnet for CBM Experiment at FAIR
<b>Mo-126</b>	Frederico B. Santos	Existence of Superconductivity in FeGa <sub>3</sub> with Mo Substitution
<b>Mo-127</b>	Haoran Liu	The effect of graphene coated Si, Ti and Nb addition on the superconducting properties of MgB <sub>2</sub> bulks
<b>Mo-128</b>	Jianqing Feng	Fabrication and properties of 19-filamentary MgB <sub>2</sub> Superconducting wires
<b>Mo-129</b>	Xu Chen	Superconductivity in layered CuAs-based oxyarsenides

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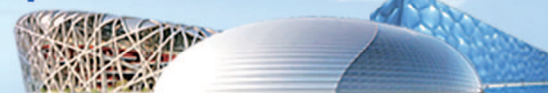


<b>Mo-130</b>	Lucas E. Corrêa	Superconductivity in a new ternary compound of the Ta-Zr-B system
<b>Mo-131</b>	Jefferson Machado	Investigation of a new hexagonal superconducting Laves phase in the ternary system Hf-V-Ga
<b>Mo-132</b>	Mário Sérgio da Luz	Superconductivity in $Zr_3V_2Ga_4$ with superconducting critical temperature close to 11 K
<b>Mo-133</b>	Yoshikazu Mizuguchi	Crystal structure and physical properties of new layered oxychalcogenide $La_2O_2M_4S_6$ (M = Bi, Pb, Ag, Cd)
<b>Mo-134</b>	Darren C. Peets	Superconductivity with First-Order Upper Critical Field in an Aluminum Cage Compound
<b>Mo-135</b>	Goto Yosuke	$NaSn_2As_2$ : a representative of a novel family of van der Waals-type superconductors
<b>Mo-136</b>	Karolina Górnicka	Superconductivity in the intermetallic Ce-based compound $CeIr_3$
<b>Mo-137</b>	Zhihe Wang	Superconducting origin from $BaO_2$ -plane in $BaPb_{1-x}Bi_xO_{3-d}$
<b>Mo-138</b>	ShuChun Huan	Evidence for a magnetic topological semimetal in CeBi from magnetotransport and magnetic measurements
<b>Mo-139</b>	Jin Si	Pressure Induced Superconductivity in the New Compound $ScZrCo_{1-\delta}$
<b>Mo-140</b>	Lina Sang	In-situ hydrostatic pressure induced significant suppression of magnetic relaxation and enhancement of flux pinning in $Fe_{1-x}Co_xSe_{0.5}Te_{0.5}$ Single Crystals
<b>Mo-141</b>	Xinsheng Yang	Non-destructive evaluation of critical current on Bi-2212 cable
<b>Mo-142</b>	Alexander J. G. Lunt	Residual Stress Quantification in $Nb_3Sn$ Thin Films for Superconducting Radio Frequency Applications
<b>Mo-143</b>	Bin Xiang	Simulation of Quench and Recovery Characteristics of YBCO Coated Conductors in Three-Dimension of DC Resistive Superconducting Fault Current Limiters
<b>Mo-144</b>	Jie Li	Activities of Chinese National Technical Committee on Superconductivity
<b>Mo-145</b>	Chang Xin Chi	Numerical Simulation on Improving Stability of Magnetic Field of Persistent Current Mode 2G HTS Coils





<b>Mo-146</b>	Jae Hyun Yun	Enhancement of the electronic thermoelectric properties by charge density wave order
<b>Mo-147</b>	Xin Sheng	Experimental and Numerical Study of Wireless Power Transfer System Using High Temperature Superconducting Coils
<b>Mo-148</b>	Sansheng Wang	Design and analysis of new hybrid magnetic shielding system: application for magnetic nondestructive testing of circuit
<b>Mo-149</b>	Chiheng Dong	Critical current and superconducting phase homogeneity in FeAs-122 superconducting tapes
<b>Mo-150</b>	Hui Dong	Multichannel Ultralow Field Magnetic Resonance Imaging Study Utilizing Low- $T_c$ SQUIDS
<b>Mo-151</b>	Xiaoming Xie	Practical low- $T_c$ SQUID Systems for Geophysics Applications
<b>Mo-152</b>	Shi Chen	Surfaces smoothing for enhancing superconducting properties of NbN nanowires by ion beam figuring
<b>Mo-153</b>	Qingyu Hu	High Temperature Superconducting Magnets in PCS Mode
<b>Mo-154</b>	Qingyu Hu	Stability of Superconducting Magnet and Wire insulations
<b>Mo-155</b>	Feng Li	Ferromagnetic Josephson Junctions Based on Epitaxial NbN/NiCu/NbN Trilayer
<b>Mo-156</b>	Xu Tao	High Speed Superconducting Nanowire Single-Photon Detector with the Capability of Photon-Number-Resolving
<b>Mo-157</b>	Qiyu Zhang	Effect of Thickness on Superconducting properties for Epitaxial NbN Films
<b>Mo-158</b>	Zigeng Huang	Temperature Dependence of Critical Current in YBCO Step-Edge Josephson Junctions
<b>Mo-159</b>	Jinbao Jiang	Memristor Behavior of 2D FeTe with High Temperature Phase Instability
<b>Mo-160</b>	Bing Shen	The vortex physics and critical current density in $\text{Ca}_{10}(\text{Pt}_n\text{As}_8)(\text{Fe}_{2-x}\text{Pt}_x\text{As}_2)_5$ and $\text{Ca}_{0.74}\text{La}_{0.26}(\text{Fe}_{1-x}\text{Co}_x)\text{As}_2$
<b>Mo-161</b>	Jeremy Brisbois	Statistics of Magnetic Field Threshold for Triggering Flux Avalanches in Nb Superconducting Films
<b>Mo-162</b>	Agustin Conde-Gallardo	Particle Size Effects on the Magnetic Properties of the $\text{SmFeAsO}_{1-x}\text{F}_x$ Superconductors.
<b>Mo-163</b>	Ryo Ogawa	Direct Current Measurement of Hall Effect in the Mixed State for the Iron-chalcogenide Superconductors



<b>Mo-164</b>	Yajun Yan	Direct Visualization of the Nematic Superconductivity in $\text{Cu}_x\text{Bi}_2\text{Se}_3$
<b>Mo-165</b>	Lingyuan Kong	Evidences of Majorana Bound States in $\text{Fe}(\text{Te},\text{Se})$ superconductor

**Tuesday Aug. 21<sup>st</sup> 12:05-14:00**  
**Poster Session 2: Experiments-1**  
*Chair: Fuchun Zhang, Univ. of CAS, China*

<b>Tu-1</b>	Arnab Roy	Study of the Superconductor–Insulator quantum phase transition using Nernst effect
<b>Tu-2</b>	Graham Baker	Ultra-long-lived quasiparticles in FeSe revealed by broadband microwave spectroscopy
<b>Tu-3</b>	Xuchen Nie	Coexistence and Competition between Pseudogap and Superconducting Quasiparticles in Underdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ by Ultrafast Time-resolved Optical Reflectivity
<b>Tu-4</b>	Bing Xu	Electron-phonon coupling in iron-based superconductors and its correlation with $T_c$
<b>Tu-5</b>	Lichen Wang	Electronic and structural instabilities in underdoped Hg-based high- $T_c$ cuprates
<b>Tu-6</b>	Shun Asano	Reduction annealing effects on crystal structure studied by multiple structure analysis in T'-type copper oxide $\text{Pr}_2\text{CuO}_4$
<b>Tu-7</b>	Yuan Wei	Spin excitation of quasi-1D superconductor $\text{BaFe}_2\text{S}_3$
<b>Tu-8</b>	Wenliang Zhang	Unconventional Antiferromagnetic Quantum Critical Point in an Iron Pnictide
<b>Tu-9</b>	Tao Xie	Neutron Spin Resonance in the 112-Type Iron-Based Superconductor
<b>Tu-10</b>	Die Hu	Structure of spin excitations in heavily electron-doped $\text{Li}_{0.8}\text{Fe}_{0.2}\text{ODFeSe}$
<b>Tu-11</b>	Shilong Wu	Direct evidence of hidden local spin polarization in centrosymmetric superconductor $\text{LaO}_{0.55}\text{F}_{0.45}\text{BiS}_2$
<b>Tu-12</b>	John Collini	Magnetic Quantum Critical Points Free From Phase Interference in $\text{Fe}_{1-x}\text{Co}_x\text{As}$ and $\text{Fe}_{1-x}\text{Co}_x\text{P}$
<b>Tu-13</b>	Qiuyun Chen	Tracing crystal-field splittings in the heavy-fermion superconductor $\text{CeIrIn}_5$



<b>Tu-14</b>	Peng Zhang	Topological Insulator and Dirac Semimetal States in Iron-based Superconductors
<b>Tu-15</b>	Timur Kim	Scaling of the Superconducting Gap with Orbital Character in FeSe
<b>Tu-16</b>	Yaomin Dai	Infrared Probe of the Gap Evolution across the Phase Diagram of $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$
<b>Tu-17</b>	Sijie Zhang	Photoexcitation-induced New Metastable State with Modulated Josephson Coupling Strengths in Electron-doped Cuprate $\text{Pr}_{0.88}\text{LaCe}_{0.12}\text{CuO}_4$
<b>Tu-18</b>	Morten Eskildsen	Using Vortices to Probes the Unconventional Superconductivity in $\text{UPt}_3$
<b>Tu-19</b>	Chennan Wang	Existence of the superconductivity cooperative hidden phase with orbital polarization in $\text{Sr}_{0.64}\text{Na}_{0.36}\text{Fe}_2\text{As}_2$ superconductor
<b>Tu-20</b>	Wenjing Ban	Revealing pseudogap in $\text{Sr}_3(\text{Ru}_{0.985}\text{Fe}_{0.015})_2\text{O}_7$ by optical spectroscopy study
<b>Tu-21</b>	Motoyuki Ishikado	High energy spin fluctuations on iron-based superconductor $\text{LaFePO}_{0.9}$
<b>Tu-22</b>	Jinchen Wang	Neutron diffraction study on magnetic structures and transitions in $\text{Sr}_2\text{Cr}_3\text{As}_2\text{O}_2$
<b>Tu-23</b>	Juanjuan Liu	Phase Diagram of the Newly Discovered Superconductors $\text{TiNi}_{2-x}\text{Co}_x\text{Se}_2$ Investigated by Neutron Diffraction
<b>Tu-24</b>	Peng Cheng	Avoided Quantum criticality and Spin glass in V-doped $\text{BaFe}_2\text{As}_2$
<b>Tu-25</b>	Muhamad Darwis Umar	An Approach from $\mu\text{SR}$ to Pseudogap States in Underdoped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$
<b>Tu-26</b>	Yong Hu	Distinct Parent Phase and Doping Evolution to Superconductivity in Single-Layer FeSe/SrTiO <sub>3</sub> Films
<b>Tu-27</b>	Jianwei Huang	Formation of Coherent Superconducting State from Incoherent Normal State in Optimally-Doped $\text{Ba}_{0.6}\text{K}_{0.4}\text{Fe}_2\text{As}_2$ Superconductor
<b>Tu-28</b>	Jianqiao Meng	ARPES investigation of electronic structure of Ce-based heavy fermion $\text{CePt}_2\text{In}_7$
<b>Tu-29</b>	Ryan Day	Spin-Orbit Coupling in Iron-Based Superconductors via Spin-ARPES

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<b>Tu-30</b>	Linjun Li	Quantum metallic state in 2D superconductor with intrinsic electronic phase inhomogeneity
<b>Tu-31</b>	Jian Li	Orbital Order and Spin Nematicity in FeSe
<b>Tu-32</b>	Shunjiao Li	$(\pi, \pi)$ spin fluctuation and pseudogap behavior in $(\text{CTA})_{0.3}\text{FeSe}$ superconductor
<b>Tu-33</b>	Shusei Onishi	Impurity Effects on Ferromagnetic Fluctuations in Heavily Overdoped Bi-2201 Cuprates
<b>Tu-34</b>	Yanling Wu	Ultrafast Dynamics Evidence of High Temperature Superconductivity in Single Unit Cell FeSe on $\text{SrTiO}_3$
<b>Tu-35</b>	Tong Lin	The energy gap and amplitude mode in charge-density-wave superconductor $\text{Bi}_2\text{Rh}_3\text{Se}_2$
<b>Tu-36</b>	Kai Wang	Mott Transition and collective charge pinning in electron doped $\text{Sr}_2\text{IrO}_4$
<b>Tu-37</b>	Xiao Ren	Raman Scattering Study of Phase Transitions in Correlated-Electron Materials
<b>Tu-38</b>	Run Yang	Insulator-to-superconductor transition in highly two-dimensional iron-based superconductor $(\text{CaFe}_{1-x}\text{Pt}_x\text{As})_{10}\text{Pt}_3\text{As}_8$
<b>Tu-39</b>	Ping Ai	A New Prospect of Bilayer Splitting Bands by ARPES based on Time-of-Flight
<b>Tu-40</b>	Li Yu	Laser ARPES study on competition between the CDW and superconducting order in the Se doped $\text{ZrTe}_3$
<b>Tu-41</b>	Cheng Hu	Evidence for Multiple Underlying Fermi Surface and Isotropic Energy Gap in the Cuprate Parent Compound $\text{Ca}_2\text{CuO}_2\text{Cl}_2$
<b>Tu-42</b>	Mingquan He	Evidence for short-range magnetic order in the nematic phase of FeSe from anisotropic in-plane magnetostriction and susceptibility measurements
<b>Tu-43</b>	An Wang	Nodeless Superconductivity in the Caged Compound $\text{Lu}_5\text{Rh}_6\text{Sn}_{18}$ with Broken Time Reversal Symmetry
<b>Tu-44</b>	Mudassar Nazir	Enhancement of Critical Current Density in Helium Ion irradiated $\text{Ba}(\text{Fe}, \text{Co})_2\text{As}_2$ Thin Films
<b>Tu-45</b>	Nan Xu	Evidence of Coulomb interaction induced Lifshitz transition and possible robust hybrid Weyl fermion in superconductor Td $\text{MoTe}_2$



<b>Tu-46</b>	Tianlun Yu	On the T <sub>c</sub> enhancement mechanism at the FeSe/SrTiO <sub>3</sub> interface
<b>Tu-47</b>	Cong Li	Orbital Origin of Extremely Anisotropic Superconducting Gap in Nematic Phase of FeSe Superconductor
<b>Tu-48</b>	Ying Ding	Laser-ARPES Study on Electron Scattering in Extremely Overdoped Bi2201 Superconductor
<b>Tu-49</b>	Ayumu Takahashi	Comparison between Effects of 1.19 GeV Pb and 320 MeV Au Irradiations on Critical Current Density in Ba <sub>0.6</sub> K <sub>0.4</sub> Fe <sub>2</sub> As <sub>2</sub>
<b>Tu-51</b>	Xiang Li	Demonstration of the Photon-number Resolving and Spatial Resolution Detector with High Input Impedance Cryogenic RF Amplifier
<b>Tu-52</b>	Qiang Gao	The Electronic Structure of Bi2212 Measured By Laser-based ToF-ARPES
<b>Tu-53</b>	Jing Liu	Growth, characterization and electronic structure measured by new generation laser-based ARTof of high temperature superconductor Bi <sub>2-x</sub> Pb <sub>x</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+δ</sub>
<b>Tu-54</b>	Haoxiang Li	Spectroscopic Evidence of Low Energy Gaps Persisting Towards 120 Kelvin in Surface-Doped p-Terphenyl Crystals
<b>Tu-55</b>	Tao Hu	Double quantum criticality in superconducting tin-arrays/graphene hybrid
<b>Tu-56</b>	Bora Won	Doping study of quasi-one-dimensional S=1/2 Heisenberg antiferromagnetic spin system Sr <sub>2-x</sub> (PbCl <sub>2</sub> ) <sub>x</sub> Cu(BO <sub>3</sub> ) <sub>2</sub>
<b>Tu-57</b>	Sunseng Pyon	Effects of particle irradiation on critical current density in CaKFe <sub>4</sub> As <sub>4</sub> single crystals
<b>Tu-58</b>	Itai Keren	Defect-assisted Tunneling and Compressibility Measurements in Graphene-hexagonal Boron Nitride Stacked Devices.
<b>Tu-59</b>	Lev Levitin	Tuning Pair-Breaking at the Surface of Topological Superfluid Helium-3
<b>Tu-60</b>	Lev Levitin	Spatially-Modulated States in Superfluid Helium-3 under Confinement
<b>Tu-61</b>	Kehuan Linghu	The application of HTS rf SQUID in ultra low field NMR system
<b>Tu-62</b>	Changsheng Chen	The coexistence of superconductivity and magnetism in NdO <sub>0.5</sub> F <sub>0.5</sub> BiS <sub>2</sub> : A muon spin rotation study



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<b>Tu-63</b>	Ce Huang	Inducing strong superconductivity in WTe <sub>2</sub> by proximity effect
<b>Tu-64</b>	Chenhaoping Wen	Unveiling the superconducting mechanism of Ba <sub>0.51</sub> K <sub>0.49</sub> BiO <sub>3</sub>
<b>Tu-65</b>	Minoru Nohara	Giant Phonon Softening and Enhancement of Superconductivity Induced by Copper/Phosphorus Doping of BaNi <sub>2</sub> As <sub>2</sub>
<b>Tu-66</b>	L.B. Wang	Optimization, Preparation and Characterization of Nanowires for High Efficiency Superconducting Nanowire Single Photon Detector
<b>Tu-67</b>	Yuting Shao	Evidence of line-nodes in superconducting gap function in K <sub>2</sub> Cr <sub>3</sub> As <sub>3</sub> from specific heat measurements
<b>Tu-68</b>	Kenji Ishida	NMR studies on the magnetic fluctuations in the artificial heavy-fermion superlattices of CeCoIn <sub>5</sub> /YbCoIn <sub>5</sub> and CeCoIn <sub>5</sub> /YbCoIn <sub>5</sub>
<b>Tu-69</b>	Dan Zhao	Breakdown of single spin-fluid model in the heavily hole-doped superconductor CsFe <sub>2</sub> As <sub>2</sub>
<b>Tu-70</b>	Shengli Guo	μSR investigation of quasi-one-dimensional superconductor K <sub>2</sub> Cr <sub>3</sub> As <sub>3</sub>
<b>Tu-71</b>	Cheng Tan	Nodal superconductivity coexists with low-moment static magnetism in single-crystalline tetragonal FeS
<b>Tu-72</b>	Liran Wang	Large nematic susceptibility in the double-Q C4 magnetic phase of Ba <sub>1-x</sub> Na <sub>x</sub> Fe <sub>2</sub> As <sub>2</sub>
<b>Tu-73</b>	Aviv Glezer Moshe	Single level and multi-level Kondo effects in granular Aluminum films
<b>Tu-74</b>	Yumika Aikawa	Metal Induced Superconductivity between Metallic Ti and MoS <sub>2</sub>
<b>Tu-75</b>	Ryosuke Ishiguro	Magnetic Interference Effects on Differential Conductance Curve of SNS Junction Made of a Metallic Channel in Zinc Oxide based Electrical Double Layer Transistor (N) Sandwiched between two Superconducting Niobium
<b>Tu-76</b>	Zhenping Wu	Critical Temperature Enhancement From Quantum Confinement in Nb <sub>x</sub> SrTi <sub>1-x</sub> O <sub>3</sub> Thin Films
<b>Tu-77</b>	Zhenping Wu	Probing Quantum Confinement and Electronic Structure at Polar Oxide Interfaces
<b>Tu-78</b>	Sven Badoux	Transport measurements of underdoped YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> under high pressure and magnetic field



<b>Tu-79</b>	Wenjun Kuang	Anomalous Surface Magnetisation in Nonsymmorphic Single Crystal Superconductor $\text{In}_2\text{Bi}$
<b>Tu-80</b>	Yufeng Wu	Superconducting Proximity and Electric Field Effect on Monolayer Graphene/Single-unit-cell Cuprate Superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ Van der Waals Heterostructure
<b>Tu-81</b>	Xia Lou	The Electronic Structure of $\text{LaIn}_3$ and $\text{CeIn}_3$ films
<b>Tu-82</b>	Shuki Wolfus	AC losses in superconducting wires and tapes - a comparative study of the behavior in $\text{Sr}_{0.6}\text{K}_{0.4}\text{Fe}_2\text{As}_2$ and $\text{MgB}_2$
<b>Tu-83</b>	Haijing Zhang	Tunneling spectroscopy of gate-induced superconductivity in $\text{MoS}_2$
<b>Tu-84</b>	Yifei Fang	Electronic Structure in the Antiferromagnetic State of Ni-doped $\text{TiCo}_2\text{Se}_2$
<b>Tu-86</b>	Ying Wang	Impurity Effects on the Superconductivity in $\text{LaO}_{0.5}\text{F}_{0.5}\text{BiS}_2$
<b>Tu-87</b>	Tatiana Charikova	Manifestation of charge carriers and vortex systems incoherence in electron-doped cuprates
<b>Tu-88</b>	Jun Li	Nematic superconducting state in the 122-type superconductors
<b>Tu-89</b>	Yi Liu	Interface induced Zeeman-protected superconductivity in ultrathin crystalline lead films
<b>Tu-90</b>	Zihao Zhu	TF- $\mu\text{SR}$ Study on Noncentrosymmetric Superconductor $\text{PbTaSe}_2$
<b>Tu-91</b>	Shu Cai	Universal Pressure Dependent Superconductivity Phase Diagrams for Tetradymite Topological Insulators

**Wednesday Aug. 22<sup>nd</sup> 12:05-14:00**

**Poster Session 3: Experiments-2**

*Chair: Nanlin Wang, Peking Univ., China*

<b>We-1</b>	Huiqian Luo	Spin Excitations in the New Iron-Based Superconductor $\text{CaKFe}_4\text{As}_4$
<b>We-2</b>	Irene Battisti	Universality of Pseudogap and Emergent Order in Lightly Doped Mott Insulators
<b>We-3</b>	Masahiro Haze	STM/STS measurements on heavy fermion $\text{CeRhIn}_5$ thin films
<b>We-4</b>	Ge He	Tunneling spectroscopy study of several essential issues in unconventional superconductors and development of combi-LMBE-STM system



<b>We-5</b>	Stepan Pryanichnikov	Crystal and Electronic structure of HTSC cuprates and related Antiferromagnetic Phases as Function of Temperature
<b>We-6</b>	Qi Huang	A full superconducting gap in noncentrosymmetric $\text{Re}_6\text{Hf}$ by point-contact Andreev reflection spectroscopy
<b>We-7</b>	Jun Lu	Development of sensitive 3D vector VSM and applications to characterization of HTSC
<b>We-8</b>	Chunguang Wang	Orbital order and quantum nematic fluctuations in $\text{NaFe}_{1-x}\text{Co}_x\text{As}$
<b>We-9</b>	Jun Luo	Structural phase transition, precursory electronic anomaly, and strong-coupling superconductivity in quasi-skutterudite $(\text{Sr}_{1-x}\text{Ca}_x)_3\text{Ir}_4\text{Sn}_{13}$ and $\text{Ca}_3\text{Rh}_4\text{Sn}_{13}$
<b>We-10</b>	Gehui Zhang	NMR study on $\text{Sr}_x\text{Bi}_2\text{Se}_3$
<b>We-11</b>	Suci Winarsih	Reduction in Néel Temperature of Nanocrystalline $\text{La}_2\text{CuO}_4$ Probed by $\mu\text{SR}$ and NMR
<b>We-12</b>	Anaëlle Legros	T-linear Resistivity and Planckian Limit in Overdoped Cuprates
<b>We-13</b>	Hodaka Kurokawa	AC Resistance of Driven Vortices in a Superconductor Measured by Microwave Technique
<b>We-14</b>	Erjian Cheng	Nodeless superconductivity in the SnAs-based van der Waals type superconductor $\text{NaSn}_2\text{As}_2$
<b>We-15</b>	Yanxing Yang	Coexistence of Static Magnetism and Superconductivity in $\text{Pr}(\text{O}_{0.5}\text{F}_{0.5})\text{BiS}_2$ as Revealed by Muon Spin Rotation/Relaxation
<b>We-16</b>	Jie Yang	Structural Phase Transition, Antiferromagnetism and Two Superconducting Domes in $\text{LaFeAsO}_{1-x}\text{F}_x$ ( $0 < x \leq 0.75$ )
<b>We-17</b>	Zheng Li	Gapped Spin-1/2 Excitations in a Kagome Quantum Spin Liquid Compound $\text{Cu}_3\text{Zn}(\text{OH})_6\text{FBr}$
<b>We-18</b>	Zhaofeng Ding	Continuous Change of Landau Renormalizations of Superfluid Density in Heavy Fermion Superconductors $\text{Ce}_{1-x}\text{Yb}_x\text{CoIn}_5$
<b>We-19</b>	Faji Xie	The quantum Hall effect and scaling law in bulk-insulating Sn doped $\text{BiSbTe}_2\text{S}$ devices
<b>We-20</b>	Yeyu Huang	Multigap Nodeless Superconductivity in $\text{CsCa}_2\text{Fe}_4\text{As}_4\text{F}_2$ Probed by Heat Transport
<b>We-21</b>	Harim Jang	Transport Property of Ferromagnetic Superconductor $\text{Y}_9\text{Co}_7$ under Pressure



<b>We-22</b>	Yong Zhong	Atomic visualization of copper oxide structure in infinite-layer cuprate SrCuO <sub>2</sub>
<b>We-23</b>	Ankit Kumar	Magneto-Optical Imaging of Vortex Lattice Melting at Low Fields in the Presence of Disorder in a Ba <sub>0.6</sub> K <sub>0.4</sub> Fe <sub>2</sub> As <sub>2</sub> Single Crystal
<b>We-24</b>	Hinako Murayama	Diagonal Nematicity in the Pseudogap Phase of Hg1201
<b>We-25</b>	Kazuhisa Hoshi	Se Isotope Effect in The Layered BiCh <sub>2</sub> -Based(Ch = S,Se) Superconductor LaO <sub>0.6</sub> F <sub>0.4</sub> Bi(S,Se) <sub>2</sub>
<b>We-26</b>	Stephen Edkins	The SQCRAMscope: Scanning Quantum Cryogenic Atom Microscope
<b>We-27</b>	Li Liu	Irradiation of Gd-doped YBCO Coated Conductors by Ar Ions
<b>We-28</b>	Jian Li	A 5K high voltage electrical breakdown measuring system incorporating a Gifford-McMahon cryocooler
<b>We-29</b>	Cun Xue	Flexible Vortex Ice and Vortex Ice-like Systems in Tailor-made Nanostructured Superconductors
<b>We-30</b>	Huaqian Leng	Type-I Superconductivity with an Unusual Surface State in the Dirac Semimetal PdTe <sub>2</sub>
<b>We-31</b>	Runze Yu	Absence of Local Fluctuating Dimers in Superconducting Ir <sub>1-x</sub> (Pt, Rh) <sub>x</sub> Te <sub>2</sub>
<b>We-32</b>	Junyi Ge	Nanoscale assembly of superconducting vortices with STM tip
<b>We-33</b>	Tian Le	Point-contact Andreev Reflection Spectroscopy Study on the Noncentrosymmetric Superconductor PbTaSe <sub>2</sub>
<b>We-34</b>	Feng Qin	Superconductivity in a Chiral WS <sub>2</sub> Nanotube
<b>We-35</b>	Haruhisa Kitano	Quantum Phase Escape from Finite Voltage State of Bi <sub>2</sub> Sr <sub>2</sub> Ca <sub>1-x</sub> Y <sub>x</sub> Cu <sub>2</sub> O <sub>y</sub> Intrinsic Josephson Junctions
<b>We-36</b>	Desheng Wu	Transport behavior of possible SC material LaX series.
<b>We-37</b>	Liguo Ma	Visualizing the Electronic Structure of Thin Layers of Cuprates
<b>We-38</b>	Yi-Min Zhang	Experimental Exploration of Interface Superconductivity in Epitaxial SnSe <sub>2</sub> Films
<b>We-39</b>	Xintong Li	Quasiparticle interference and charge order in a heavily overdoped non-superconducting cuprate

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<b>We-40</b>	Gael Grissonnanche	Large Negative Thermal Hall Response Inside the Pseudogap Phase of Cuprates
<b>We-41</b>	Satoshi Demura	Observation of Supermodulation in $\text{LaO}_{1-x}\text{F}_x\text{BiSe}_2$ by Scanning Tunneling Microscopy/Spectroscopy
<b>We-42</b>	Shun Ohta	STM Observation of Charge Density Wave States in $2\text{H-TaS}_{2-x}\text{Se}_x$
<b>We-43</b>	Mingyang Chen	Superconductivity with Twofold Symmetry in $\text{Bi}_2\text{Te}_3/\text{FeTe}_{0.55}\text{Se}_{0.45}$ Heterostructures
<b>We-44</b>	Koki Kawabata	Reduction Annealing and Electronic States in Single Crystals of T'-Cuprate $\text{Pr}_2\text{CuO}_{4+\delta}$
<b>We-45</b>	Zuyu Xu	Tunable Josephson junction based on black phosphorus
<b>We-46</b>	Yupeng Li	Superconductivity and charge-density wave in iodine-doped nodal-line semimetal $\text{In}_x\text{TaSe}_2$
<b>We-47</b>	Chen Chen	Superconducting Proximity Effect of Bi (110) Films on $\text{NbSe}_2$ Substrate Studied by STM
<b>We-48</b>	Beilun Wu	22 T superconducting magnet for scanning tunneling microscopy at dilution refrigeration temperatures
<b>We-49</b>	Qin Liu	STM Investigation of the Field-induced Magnetic Phase Transitions in $\text{CeSb}$
<b>We-50</b>	Zhenhai Yu	Pressure-induced isostructural phase transition and charge transfer in $\text{FeSe}$
<b>We-51</b>	Xiu-Zhi Duan	Hopping Conductance and Dissipation Effect in Three Dimensional $\text{Pb}_x(\text{SiO}_2)_{1-x}$ Granular Films
<b>We-52</b>	Ying Xing	Ising Superconductivity and Quantum Phase Transition in Macro- Size Monolayer $\text{NbSe}_2$
<b>We-53</b>	Amirreza Ataei	Evolution of pseudogap phase under pressure and endpoint of CDW in $\text{Nd-LSCO}$ probed by transport measurements
<b>We-54</b>	Chaofei Liu	Detection of bosonic mode as a signature of magnetic excitation in one-unit-cell $\text{FeSe}$ on $\text{SrTiO}_3$
<b>We-55</b>	Xi Liu	Scanning tunneling microscopy study of the Hidden Order in heavy fermion material $\text{URu}_2\text{Si}_2$
<b>We-56</b>	Ivan Maggio-Aprile	A high $T_c$ Superconductor Reveals Caroli-de Gennes-Matricon Vortex States





<b>We-57</b>	Seyed Amirreza Ataei	Pressure tuning the pseudogap critical point: evidence from Seebeck and Nernst effect
<b>We-58</b>	Zhenhua Chi	Superconductivity in Pristine 2H <sub>a</sub> -MoS <sub>2</sub> at Ultrahigh Pressure
<b>We-59</b>	Jian Chen	Heavy fermion quantum criticality at dilute carrier limit in CeNi <sub>2-δ</sub> (As <sub>1-x</sub> P <sub>x</sub> ) <sub>2</sub>
<b>We-60</b>	Yanpeng Qi	Pressure-induced superconductivity and topological quantum phase transitions in a quasi-one-dimensional topological insulator: Bi <sub>4</sub> l <sub>4</sub>
<b>We-61</b>	Hao Su	High magnetic field magnetotransport and ARPES measurements on a magnetic semimetal EuCd <sub>2</sub> Sb <sub>2</sub>
<b>We-62</b>	Marcin Matusiak	Thermoelectric anisotropy in Ba(Fe <sub>1-x</sub> Co <sub>x</sub> ) <sub>2</sub> As <sub>2</sub> iron-based superconductor
<b>We-63</b>	Kyoung Seok Lee	STM Studies of Density Modulations in the Pseudogap State of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+δ</sub>
<b>We-64</b>	Ran Tao	Superconductivity across Lifshitz transition and anomalous insulating state in surface K-dosed (Li <sub>0.8</sub> Fe <sub>0.2</sub> OH)FeSe
<b>We-65</b>	Huan Yang	Drive the Dirac Electrons into Cooper Pairs in Possible Topological Superconductor Sr <sub>x</sub> Bi <sub>2</sub> Se <sub>3</sub>
<b>We-66</b>	Siyuan Wan	Sign Reversal Superconducting Gap Revealed by Phase Referenced Quasi-particle Interference in (Li <sub>1-x</sub> Fe <sub>x</sub> )OHFe <sub>1-y</sub> Zn <sub>y</sub> Se and Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+δ</sub>
<b>We-67</b>	Xiaoyu Chen	Discrete Energy Levels of Caroli-de Gennes-Matricon States in Quantum Limit Due to Small Fermi Energy in FeTe <sub>0.55</sub> Se <sub>0.45</sub>
<b>We-68</b>	Qiangqiang Gu	Determination of the Sign Reversal Superconducting Gaps on (Li <sub>1-x</sub> Fe <sub>x</sub> )OHFe <sub>1-y</sub> Zn <sub>y</sub> Se
<b>We-69</b>	Jing Guo	Electron-Hole Balance and the Anomalous Pressure-Dependent Superconductivity in Black Phosphorus
<b>We-70</b>	Roland Schäfer	Influence of persistent photoconductivity on superconductivity in the STO/LAO interface
<b>We-71</b>	Masahiro Naritsuka	Tuning the Pairing Interaction in a d-Wave Superconductor by Paramagnons Injected through Interfaces
<b>We-72</b>	Masahiro Haze	Impurity Effect in Heavy Fermion Superconductors Studied by STM

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<b>We-73</b>	Zhixin Liu	Gap structure evolution in $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ single crystals studied by point-contact Andreev reflection spectroscopy
<b>We-74</b>	Hong Xiao	Superconductivity in half-Heusler compound $\text{TbPdBi}$
<b>We-75</b>	Hiroyoshi Nobukane	High- $T_c$ superconductivity in a ruthenate
<b>We-76</b>	Xiangzhuo Xing	Correlation between non-Fermi-liquid behavior and superconductivity in $(\text{Ca}, \text{La})(\text{Fe}, \text{Co})\text{As}_2$ iron arsenides: A high-pressure study
<b>We-77</b>	Yuki Itahashi	Nonreciprocal Transport by Vortex Ratchet Motion in 2D Superconducting $\text{MoS}_2$
<b>We-78</b>	Kousuke Ishida	Unusual Evolution of Electronic Nematicity in the Heavily Hole-Doped $\text{Ba}_{1-x}\text{Rb}_x\text{Fe}_2\text{As}_2$
<b>We-79</b>	Marcin Konczykowski	Disorder induced switching from antiferromagnetic to paramagnetic ground state in under doped iron-based superconductors
<b>We-80</b>	Sixiao Ma	Half-integer Thermal Hall Effect in $\alpha\text{-RuCl}_3$ : a signature of Majorana fermions
<b>We-81</b>	Wanghao Tian	Observation of phase-sensitive symmetry gap for Fe-based superconductors from $\text{Nb}/\text{Al}/\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ hybrid Josephson junction
<b>We-82</b>	Yanpeng Song	Gate-Induced Superconductivity in $\text{SnX}_2$
<b>We-83</b>	Xu Zhang	Magnetic Field Induced Ordering in Electron-doped Cuprate $\text{La}_{2-x}\text{Ce}_x\text{CuO}_{4\pm\delta}$
<b>We-84</b>	Zhao-Yu Liu	Interplay between nematic fluctuations and superconductivity in $\text{BaFe}_{2-x}\text{Ni}_x\text{As}_2$
<b>We-85</b>	Yanhong Gu	Nematic fluctuations in $\text{NaFe}_{1-x}\text{Ni}_x\text{As}$
<b>We-86</b>	Xiaoyan Ma	The Study of Quantum Critical Point in $\text{BaFe}_{2-x-y}\text{Ni}_x\text{Cr}_y\text{As}$ Based Superconductors
<b>We-87</b>	Alex Frano	Stabilization of three-dimensional charge order in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ via epitaxial growth
<b>We-88</b>	Wan Kyu Park	Studies of the Superconducting Order Parameter in the Heavy-Fermion Superconductor $\text{CeCoIn}_5$ via Planner Tunneling Spectroscopy at High Magnetic Field



**Thursday Aug. 23<sup>rd</sup> 12:05-14:00**

**Poster Session 4: Theories**

*Chair: Tao Xiang, Inst. of Physics, CAS, China*

<b>Th-1</b>	Kaoru Domon	Theory of electronic states in Ta <sub>2</sub> NiSe <sub>5</sub> under pressure as a candidate material of excitonic phase
<b>Th-2</b>	Masaki Umeda	Superconducting Critical Temperature for a Dirty Nano-structured Superconductor
<b>Th-3</b>	Peiran Zhang	Topological transition in a family of non-centrosymmetric superconductors
<b>Th-4</b>	Karin Matsumoto	Possible High-T <sub>c</sub> Superconductivity Originating from Wide- and Narrow-Bands; Study on 1D and 2D Lattices
<b>Th-5</b>	Daisuke Ogura	Possibility of High-T <sub>c</sub> Superconductivity in Ruddlesden-Popper Type Materials: Incipient Narrow Bands Originating from "Hidden Ladder" Electronic Structure
<b>Th-6</b>	Sharareh Sayyad	Non-equilibrium electron dynamics after a quench of the interaction in the doped 2D Hubbard model
<b>Th-7</b>	Muhammad Redo Ramadhan	Muon's Perturbation on the Local Spatial Distribution of Cu-Spin La <sub>2</sub> CuO <sub>4</sub> Simulated by Density Functional Theory Calculation
<b>Th-8</b>	Smritijit Sen	First Principles Investigations on a New 1111-type Fe-based Superconductor: ThFeAsN
<b>Th-9</b>	Jie Hou	Emergence of d <sub>xy</sub> -Wave Superconductivity in a Doped Spin-1 Chain
<b>Th-10</b>	Rameshbabu Kunchala	Electron-Phonon Coupling and Superconductivity in NbN Polytypes
<b>Th-11</b>	Wei Zhu	Competing orders and fluctuations in the nematic phase of iron-based Superconductors
<b>Th-12</b>	Liangjian Zou	Orbital-driven two-dome superconducting phases in iron-based superconductors
<b>Th-13</b>	Narayan Mohanta	Supercurrent as a Probe for Topological Superconductivity in Magnetic Adatom Chains
<b>Th-14</b>	Xiaowei Liang	Prediction of High-Pressure Phase Stability and Superconductivity of GaScH <sub>6</sub>

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<b>Th-15</b>	Zhe Liu	Possible s-wave superconducting state in twisted bilayer graphene
<b>Th-16</b>	Daichi Kato	Variational Monte-Carlo Study of the Bilayer Hubbard Model
<b>Th-17</b>	Tae-Ho Park	Dynamical effects of BCS-BEC crossover in Holstein model
<b>Th-18</b>	Guoxiang Zhi	Electronic structure of Co-doped BaZn <sub>2</sub> As <sub>2</sub>
<b>Th-19</b>	Wenjian Lu	Manipulating charge-density-wave in monolayer 1T-TiSe <sub>2</sub> by strain and charge doping
<b>Th-20</b>	Artur Durajski	Phonon-mediated high-temperature superconductivity: in search of RTSC
<b>Th-21</b>	Ulugbek Kurbanov	Nanoscale Phase Separation and Coexistence of Insulating, Metallic and Superconducting Phases in Underdoped Cuprates
<b>Th-22</b>	Safarali Djumanov	The Behaviors of the Electronic Specific Heat of High-T <sub>c</sub> Cuprates Near the Superconducting and Pseudogap Transition Temperatures.
<b>Th-23</b>	An He	Rectification effect in a nanostructured superconducting film with a square array of antidot triplets
<b>Th-24</b>	Yury Panov	Phase Separation in 2D Spin-Pseudospin Model
<b>Th-25</b>	Yang Liu	A Factor Governing the Ceiling of Optimal T <sub>c</sub> of diverse high T <sub>c</sub> superconductors
<b>Th-26</b>	Motoharu Kitatani	Why T <sub>c</sub> is So Low in High-T <sub>c</sub> Cuprates: the Importance of the Dynamical Vertex Structure
<b>Th-27</b>	Mi Jiang	Relevance of atomic multiplet structure to models of cuprate layers
<b>Th-28</b>	Mi Jiang	d-wave superconductivity in the presence of nearest neighbor Coulomb repulsion
<b>Th-29</b>	Yury Panov	Vortices and Skyrmion-Like States in 2D System of Charged Hard-Core Bosons
<b>Th-30</b>	Zhi Li	Second harmonic generation in the Weyl semimetal TaAs from a quantum kinetic equation
<b>Th-31</b>	Shuiquan Deng	“Flat/Steep” Band Model for Superconductivity
<b>Th-32</b>	Chunfang Zhang	Theoretical Insights into Potassium Hydride Formation in Potassium Aromatic Systems



<b>Th-33</b>	Sylwia Golab	Superconductivity of ABi <sub>2</sub> Compounds (A=Rb, Cs, Ca): the Role of Bi and the Influence of the Spin-Orbit Coupling.
<b>Th-34</b>	Jose Antonio Verges	Prediction of a Metallic Phase for Tricesium Pentacene Compound
<b>Th-35</b>	Yuekun Niu	A Dynamical Mean-Field Study of Orbital-Selective Mott Phase Enhanced by Next-Nearest Neighbor Hopping
<b>Th-36</b>	Sanjeev K. Verma	Angular Superconducting Gap in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub>
<b>Th-37</b>	Irwan Ramli	Density Functional Theory Simulation of Spin Distribution Perturbed by Muon in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6</sub>
<b>Th-38</b>	Han-Ting Wang	Quasi-particle Density of States in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+δ</sub> Extracted with the Maximum Entropy Method
<b>Th-39</b>	Xi Chen	Simulation of the NMR Response of Cuprates Above and Below the Superconducting Temperature
<b>Th-40</b>	Vasily Shaginyan	Physics of high-T <sub>c</sub> overdoped copper oxides
<b>Th-41</b>	Taiki Matsushita	Strain-induced spin/charge supercurrent flow in Dirac/Weyl superconductor
<b>Th-42</b>	Rina Tazai	Mechanism of Fully Gapped Superconductivity Mediated by MultiPole Fluctuations: Important Roles of Strong Spin-Orbit Interaction
<b>Th-43</b>	Wei-Liang Qian	A holographic superconductor in higher derivative gravity theory
<b>Th-44</b>	Priyo Adhikary	Superconductivity from valence fluctuations
<b>Th-45</b>	Safarali Djumanov	Bosonization of Cooper Pairs and Novel Bose-liquid Superconductivity in High-T <sub>c</sub> Cuprates
<b>Th-46</b>	Shota Kanasugi	Ferroelectric-like Order in Spin-Orbit-Coupled Superconductors
<b>Th-47</b>	Roman Mints	Quantization of Electronic Excitations in Vortex Core: Semi-Classical Approach
<b>Th-48</b>	Jiangfan Wang	Covariant gaussian approximation in Ginzburg–Landau model
<b>Th-49</b>	Shuntaro Sumita	Unconventional superconducting gap structure protected by space group symmetry



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<b>Th-50</b>	Hong-Ji Wang	A New Theory of Superconducting Materials and Superconducting Mechanisms
<b>Th-51</b>	Wen Huang	Two recent results on the theories of the superconducting $\text{Sr}_2\text{RuO}_4$
<b>Th-52</b>	Evgeny Mazur	The superconducting transition temperature in two-band electron-phonon system with interband pairing
<b>Th-53</b>	Keisuke Mitsumoto	Simultaneous Phase Transitions of Superconductivity and Electric Hexadecapole in Iron Pnictide $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$
<b>Th-54</b>	Oleg Dolgov	The Electron-Phonon Interaction with Forward Scattering Peak in FeSe on $\text{SrTiO}_3$
<b>Th-55</b>	Rong Li	Local Quantum Order Induced Hole Transport in High-temperature Cuprate Superconductors
<b>Th-56</b>	Yuki Nagai	Time-reversal and/or translational symmetry breaking in d-wave nano-superconductors
<b>Th-57</b>	Wenxin Ding	A Strange Metal from Gutzwiller correlations: Transverse Transport, Optical Response and Rise of Two Relaxation Rates
<b>Th-58</b>	Huaisong Zhao	Pseudogap-generated a coexistence of Fermi arcs and Fermi pockets in cuprate superconductors
<b>Th-59</b>	Lin Li	Rashba-induced Kondo screening of a magnetic impurity in two-dimensional superconductor
<b>Th-60</b>	Jia-Cheng He	Theoretical Formalism of Andreev Reflection Spectroscopy for Three-dimensional Triplet Pairing Superconductors
<b>Th-61</b>	Jinhuan Jiang	Magnetic-interaction-induced superconductivity in metals
<b>Th-62</b>	Jinhuan Jiang	High-TC superconductivity induced by magnetic interactions
<b>Th-63</b>	Jamie Booth	Towards a Standard Model for Condensed Matter Physics: From Peierls and Mott to High $T_c$ Superconductivity
<b>Th-64</b>	Aabhaas Vineet Mallik	Surprises in the t-J model: Implications for cuprates
<b>Th-65</b>	Henri Menke	Spin-orbit coupling and time-reversal symmetry breaking in a multiband superconductor
<b>Th-66</b>	Henri Menke	Non-hermitian topological quantum wires with balanced gain and loss



<b>Th-67</b>	Yiqun Liu	Electronic Structure of Bilayer Cuprate Superconductors
<b>Th-68</b>	Xingchuan Zhu	Pairing Symmetry of Interacting Fermions on Twisted Bilayer Graphene Superlattice
<b>Th-69</b>	Shuning Tan	Autocorrelation of Quasiparticle Excitation Spectral Intensities and Its Connection with Joint Density of States in Cuprate Superconductors
<b>Th-70</b>	Alejandro Mezio	Effect of the Hund's rule and orbital anisotropy in the two-band Hubbard model: a finite-temperature slave-spin treatment
<b>Th-71</b>	Bin Liu	Pairing symmetry determined by local density of states around impurities in heavy-fermion superconductors
<b>Th-72</b>	Lukas Schwarz	Theory of Higgs Spectroscopy for Superconductors in Nonequilibrium
<b>Th-73</b>	Yiming Wang	Theoretical study on the phonon softening in iron-based superconductors
<b>Th-74</b>	Weiqiang Chen	Nodeless gap induced by proximity effect in monolayer CuO <sub>2</sub> on BSCCO substrate
<b>Th-75</b>	Yingping Mou	Doping and Momentum Dependence of Pairing Interactions in Cuprate Superconductors
<b>Th-76</b>	Jin Mo Bok	Exciton condensation temperature and odd frequency pairing in a transition metal dichalcogenide 1T-TeSe <sub>2</sub>
<b>Th-77</b>	Jiangdi Fan	Introspection of Mechanism Theories of Superconductivity
<b>Th-78</b>	Dawei Yao	The driving mechanism and the form of the orbital order in the iron-based superconductors
<b>Th-79</b>	Ling Qin	absence of the asymmetry in phase diagram
<b>Th-80</b>	Masahiko Hayashi	Fluctuation Effects on the Phase Diagram of Cuprate High-T <sub>c</sub> Superconductors Based on the t-J Model
<b>Th-81</b>	Zhihao Geng	Magnetic Field dependent Raman Response in Over-electron-doped Cuprates
<b>Th-82</b>	Shun Tamura	Theory of proximity effect in dxy-wave superconductor with Rashba spin-orbit interaction
<b>Th-83</b>	Shengtao Jiang	Non-Fermi Liquid Scattering Against Emergent Bose Liquid: Manifestations in the Kink and Other Exotic Quasiparticle Behaviors in the Normal-State Cuprate

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<b>Th-84</b>	Chandan Setty	Inequivalence of the zero-momentum Limits of Transverse and Longitudinal Dielectric Response in the Cuprates
<b>Th-85</b>	Xianxin Wu	Substrate-supported triplet superconductivity in Dirac semimetals

Poster size: 90 cm [35 in] (width) x 120 cm [47 in] (length)		
Poster Presentation Date	Set up after	Take down before
Monday, August 20	07:30 on Monday	18:00 on Monday
Tuesday, August 21	07:30 on Tuesday	18:00 on Tuesday
Wednesday, August 22	07:30 on Wednesday	18:00 on Wednesday
Thursday, August 23	07:30 on Thursday	18:00 on Thursday
If you did not take down your poster after 18:00 at the presentation day, your posters will be disposed by conference organizers.		



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## 9. General Information

### 9.1 About Beijing

Beijing, the capital of People's Republic of China (PRC), the center of politics, culture, transport, tourism and international communication, is a fast-growing, dynamic metropolis that, while courting foreign businesses and visitors, maintains a firm grip on its rich cultural heritage. It is a monolithic showcase that can give a brief view of China to foreign visitors.

- Area: 16,800 sq km (6552 sq mi)
- Population: 21.7 million
- Country: People's Republic of China
- People: 95% Han Chinese
- Main language: Mandarin (putonghua)
- Time zone: GMT/UTC plus 8 hours
- Telephone area code: 010

As an ancient city, Beijing's history can be tracked back to 3,000 years ago. In the Spring-Autumn and warring Periods (770 BC – 221 BC), Yan Nation established capital in Beijing, called "Ji". In Qin, Han and Three Kingdoms time Beijing area is the center of northern China. Wang Mang established in Beijing in the Yan Nation in end of the Western Han Dynasty, so that Beijing is also called "Yanjing". During the South Song Dynasty Liao Nation established the Capital in Beijing called Pei, Jin Dynasty officially established Capital in Beijing. Ever since, the Yuan Dynasty, Ming Dynasty and Qing Dynasty were established Capital in Beijing, a total of 34 emperors reigned over the whole country in Beijing.

The long history of Beijing left a large number of cultural relics and a rich and varied human landscape, which provided very rich tourism resources for Beijing. The magnificent Great Wall and the Forbidden City are the world-famous tourist attractions. The beauty of the Summer Palace, Beihai, Xiangshan, the Temple of Heaven, the Royal Garden are magnets for visitors.

After the founding of New China, Beijing, as the country's political and cultural center, the social business and urban infrastructure facilities have been making considerable progress. Especially more than 20 years after 1978 with the implementation of "reform and opening up", Beijing has developed and changed rapidly. Now, it is a modern city with high-rise buildings, shopping malls and vast international hotels connected by an intricate freeway system crisscrossing the city. In the rush hour, traffic jams can match those of any major city around the world and the ringing of mobile phones is incessant. However, the modern buildings conceal traditional hutongs, parks, numerous architectural treasure and exquisite yellow-tiled temples whose prayer flags and wind chimes move in the breeze created by the passing traffic.





## 9.2 Travel Tips



### Weather

The climate in Beijing is “continental”, with cold and dry winters, due to the Siberian air masses that move southward across the Mongolian Plateau. Summers are generally hot owing to warm and humid monsoon winds from the southeast bringing Beijing most of its annual precipitation. January is the coldest month and July is the hottest. Winters usually begin since the end of October. The summer months, June to August, are wet and hot with about 40% of the annual precipitation.

Average Data	Average High °F	Average High °C	Average Low °F	Average Low °C	Max (°F)	Max (°C)	Min (°F)	Min (°C)	Rain (in)	Rain (mm)
Aug	84/88	29/31	67/71	20/22	107	41.7	54	12.2	7.1/7.2	180/185



### Electricity

The electric current used in China is 220V 50Hz. Hotels provide 220V and 110V (shavers only) power outlets. Please note that plug adapters and converters might be required.



### Currency and Exchange

The currency used in China is the Renminbi Yuan (RMB or ¥) and the value is pegged to the US dollar with a current exchange rate of US\$ 1: RMB 6.76 (July 2018). The Yuan is divided into 10 Jiao or 100 Fen. Notes come in denominations of ¥100, 50, 20, 10, 5 and 1. Exchange your leftover Yuan before returning home as it can only be exchanged within China's borders.

Euros and US Dollars can be exchanged at your hotel or at any bank. Traveller's cheques can only be exchanged at the Bank of China. Banks usually open from 9 a.m. to 5 p.m. From Monday to Friday and 9 a.m. to 4 p.m. on Saturday and Sunday. Currency exchange services are available for the following foreign currencies: US Dollar, British Pound Sterling, Euro, Japanese Yen, Australian Dollar, Canadian Dollar, Hong Kong Dollar, Swiss Franc, Danish Krone, Norwegian Krone, Swedish Krone, Singapore Dollar, Malaysian Ringgit, and Macao Pataca.

Major credit cards are accepted at many establishments, such as American Express, Diners Club, JCB, Master Card and Visa.



### ATM Machine

Beijing is a very ATM-friendly city. There are many banks with ATMs, but only about 50% of these accept foreign cards. The main foreign friendly ATMs are controlled by the Bank of China. Bank of China ATMs work in both Chinese and English (depending on your card), use the latest equipment, and are reasonably easy to find.





### **Safety and Security**

In general China is a very safe country. However, be aware of pickpockets and be careful when crossing the road. Passports should be kept in the hotel for safety until the departure day. Also note the serial numbers of your traveller's checks if you carry those. We also recommend having copies of your passport and credit cards with you in case of loss or theft.



### **Tipping**

Gratuities are not customary in China. However, in hotels and during group travels, tipping is practiced for porters, tour guides and drivers.



### **Smoking**

Smoking in indoor public places has been banned in Beijing from June 1, 2015 following the rolling out of the toughest ever anti-smoking regulation in China. The regulation extends smoking bans to include all indoor public areas and workplaces, plus a number of outdoor areas including schools, seating areas in sports stadiums and hospitals where women or children are treated.



### **Time**

China covers four time zones. Beijing time is the only official time throughout the country; punctuality is highly appreciated.

### **Transportation**



#### ***Public Buses***

Buses are the main means of transport in Beijing. Please prepare small bills as not all buses will carry change. Buses can be very crowded during peak times, which are generally from 7-9 a.m. and 4-6 p.m.



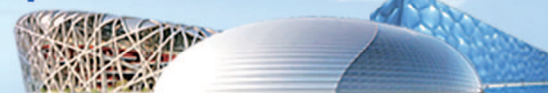
#### ***The Subway***

The subway system in Beijing has 15 lines. The fare is 3 - 9 yuan. Trains run from 5:30 in the morning until 11:00 in the evening. A ticket can be bought at the ticket office at each station or at an automatic ticketing machine. Subway stops are announced over the train's speaker system in Chinese and English.



#### ***Taxis***

Taxis in Beijing have several colours. All of them show a taximeter inside. You can easily find them in every part of Beijing. All Taxis will charge 2.3 yuan per kilometer with a base rate or minimum charge of 13 yuan.



## 9.3 Tours at Beijing

### 1: The Forbidden City (故宫)

As the seat of Imperial power for 500 years, the Forbidden City (also known as the Palace Museum) is now the largest museum and one of the top tourism attractions in China. The palace has been burnt down, rebuilt, sacked and renovated countless times, so most of the architecture you can see today dates from the 1700's and onwards. Altogether there are 9,999.5 rooms in the Museum, not all of which can be visited. The Forbidden City was listed as a UNESCO World Heritage site in 1987.

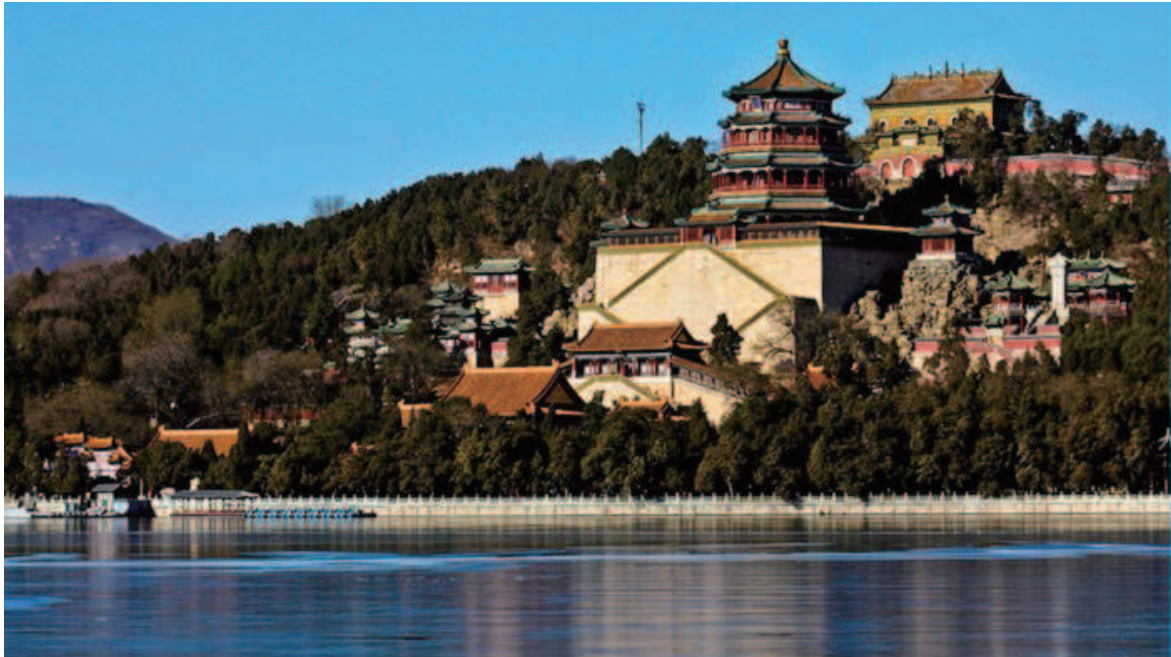
**Tips:** In order to preserve the World Heritage Site and guarantee a better visiting experience, the Forbidden City is limiting the daily number of visitors to 80,000. If you choose this route, please **provide your valid IDs and passport numbers** so that we can register and book tickets online in advance. On the day of visit, please bring your valid ID cards or passports in case of random admission checks.



### 2: The Summer Palace (颐和园)

The Summer Palace is the largest and most well-preserved royal garden in China. The park greatly influences Chinese horticulture and landscape with its famous natural views and cultural interests, which also has long since been recognized as The Museum of Royal Gardens. Construction started in 1750 as a luxurious royal garden for royal families to rest and entertain. It later became the main residence of royal members towards the end of the Qing Dynasty. It ranked amongst the World Heritage Sites by UNESCO in 1998.





### **3: The Great Wall at Badaling(八达岭长城风景名胜区)**

The Great Wall at Badaling was built along the ridges of mountains, looking precipitous from the external wall but gently sloped from the internal wall. It is a section of the Great Wall opened earliest to tourists and receives the largest number of tourists. In the six decades since it opened, the Great Wall at Badaling scenic spot, on behalf of the Great Wall of China, was conferred with the World Cultural Heritage license by UNESCO. In 2007, in the appraisal of the world's new seven wonders, Great Wall maintained its top position because of its extensive and profound history and culture, and unprecedented prestige in the world.







Badaling Great Wall



Yuanmingyuan Imperial Garden



Summer Palace



National Stadium (Bird's Nest)



National Aquatics Center (Water Cube)

BICC

北

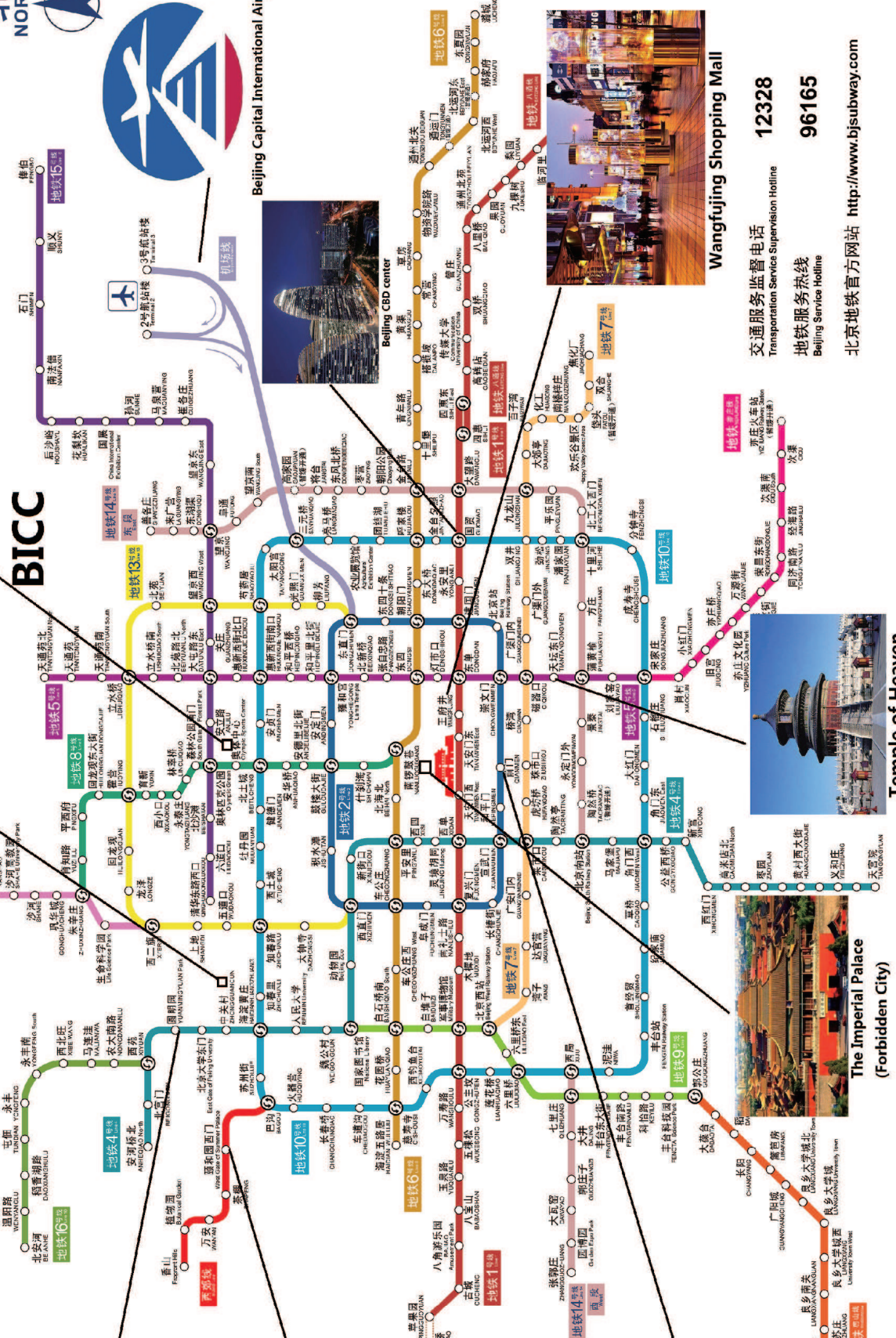
NORTH



Beijing Capital International Airport



Beijing Capital International Airport



Wangfujing Shopping Mall

交通服务监督电话 12328

Transportation Service Supervision Hotline

地铁服务热线 96165

Beijing Service Hotline

北京地铁官方网站 <http://www.bjsubway.com>



Temple of Heaven



The Imperial Palace (Forbidden City)



Qianmen Street (Front door of Beijing)





# National Lab for Superconductivity

The establishment of the National Laboratory for Superconductivity (NLSC) at IOP was approved in 1987. After passing the inspection in April 1991, NLSC was formally accepted and listed as a state key laboratory and officially opened to both domestic and foreign researchers. In December 2004, the Ministry of Science and Technology of the People's Republic of China (MOST) awarded NLSC with the title of Advanced Group in the Program of State Key Laboratory. Research at NLSC primarily covers frontier fundamental research and basic applied technology. Current research projects include searching for new superconductors, investigating the mechanism of superconductivity and related physics problems, synthesizing thin films as well as developing thin film superconductor devices and their applications.

During the new upsurge of research in superconductivity triggered by the discovery of iron-based superconductors in 2008, scientists in NLSC have again drawn worldwide attention by their remarkable contributions on exploring new iron based materials with higher  $T_c$  and studying the related physical properties of iron based superconductors. NLSC is now further devoted to refining research projects, optimizing personnel structure, recruiting new talents, developing unique state of art experimental facilities as well as initiating innovative research. NLSC is dedicated to being a world class lab and preparing for more momentous scientific breakthroughs henceforth.

Website: <http://nlsc.iphy.ac.cn/Ephy-41.aspx>

2016 National Highest Science and Technology Award (Prof. Zhongxian Zhao)



Prime Minister Li Keqiang visited the Lab



TWAS 2015 Prize in Physics (Prof. Xingjiang Zhou)



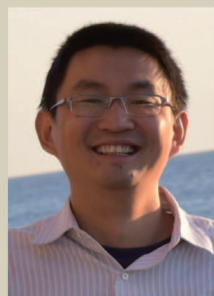
Founding director  
Prof. Zhongxian ZHAO  
(Term: 1988–2000. 9)



2<sup>nd</sup> director  
Prof. Hai-Hu WEN  
(Term: 2000. 9–2009. 6)



Director  
Prof. Xingjiang ZHOU  
(Term: 2009. 6 – )



Deputy director  
Prof. Kui JIN  
(Term: 2017. 9 – )

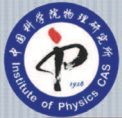


Chair of the Academic Committee  
Prof. Tao XIANG  
(Term: 2018. 1 – )

Family photo of the National Lab for Superconductivity and academic committee (2018)







# 超导国家重点实验室研究组和研究方向

Research Groups and Directions of National Lab for Superconductivity, IOP, CAS



## SC2

基于高通量组合薄膜技术的新超导体探索和物理研究  
Exploration of New Superconductors and Novel Superconductivity on High-throughput Combinatorial Thin Films

组长: 金魁  
Group Leader: JIN Kui



金魁 (JIN Kui)



袁捷 (YUAN Jie)



朱北峰 (ZHU Beifeng)



许波 (XU Bo)



何格 (HE Ge)



贾旭豪 (JIA Yuhao)



魏鑫捷 (WEI Xingjie)



胡卫 (HU Wei)



冯中泽 (FENG Zhongze)



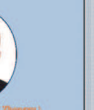
张旭 (ZHANG Xue)



杨辉 (YANG Hui)



钱明宗 (QIAN Mingzong)



魏忠泽 (WEI Zhongze)

## SC3

介观尺度超导体中量子现象的研究  
Research on the Quantum Phenomena in Mesoscopic Superconductors

组长: 邱祥冈  
Group Leader: QIU Xianggang



邱祥冈 (QIU Xianggang)



董成 (DONG Cheng)



李柏儒 (LI Baoru)



李春红 (LI Chunhong)



谢华 (XIE Hua)



周孟河 (ZHOU Menghe)



李晓虎 (LI Xiaohu)



杨锐 (YANG Rui)



钱子阳 (QIAN Ziyang)



邵强涛 (SHAO Qiangtao)



彭震 (PENG Zhen)



刘禹 (LIU Yu)



郭伟国 (GUO Weiguo)

## SC4

探索高温超导体及相关的机理研究  
Exploring new unconventional superconductor and its mechanism

组长: 董晓莉  
Group Leader: DONG Xiaoli



董晓莉 (DONG Xiaoli)



赵忠贤 (ZHAO Zhongxian)



孙力玲 (SUN Liling)



周放 (ZHOU Fang)



郭静 (GUO Jing)



马明伟 (MA Mingwei)



周欢 (ZHOU Huan)



黄裕宏 (HUANG Yuhong)



毛宇航 (MAO Yuhang)



王虹枫 (WANG Hongfeng)



杨震 (YANG Zhen)



史顺利 (SHI Shuli)



蔡树 (CAI Shu)



刘少杰 (LIU Shaojie)



刘镇杰 (LIU Zhenjie)



田杰 (TIAN Jie)



史宇航 (SHI Yuhang)



刘广昌 (LIU Guangchang)

## SC5

超导薄膜材料和器件的物理及应用  
Superconducting Thin Films and Devices

组长: 郑东宁  
Group Leader: ZHENG Dongning



郑东宁 (ZHENG Dongning)



金勇 (JIN Yong)



储谦进 (CHU Qianjin)



张强强 (ZHANG Xiangqiang)



李长强 (LI Changqiang)



李国强 (LI Guangqiang)



边勇和 (BIAN Yonghe)



王健 (WANG Jun)



郭信义 (GUO Xinyi)



李贺康 (LI Hekang)



黄海 (HUANG Hui)



宋鹏涛 (SONG Pengtao)



苏 Labing (SU Labing)



王震 (WANG Zhen)

## SC7

超导材料和其它量子材料的光电子能谱研究  
Photoemission Spectroscopy Study on Superconductors and Other Quantum Materials

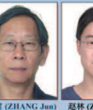
组长: 周兴江  
Group Leader: ZHOU Xingjiang



周兴江 (ZHOU Xingjiang)



刘国栋 (LIU Guodong)



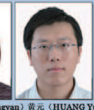
张军 (ZHANG Jun)



赵辽 (ZHAO Liao)



俞力 (YU Li)



王庆南 (WANG Qingnan)



黄元 (HUANG Yuan)



李丛 (LI Cong)



洪涛 (HONG Hongtao)



蔡永峰 (CAI Yongfeng)



陈兴杰 (CHEN Xingjie)



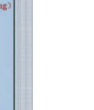
杨辉 (YANG Hui)



杨宇航 (YANG Yuhang)



李杨 (LI Yang)



莫晨 (MO Chen)

## SC8

通过中子散射研究包括铁基和铜氧化物高温超导体在内的强关联材料  
Neutron Scattering on the Strong Correlated Materials Including the Iron-based and Copper Oxide High-temperature Superconductors

组长: 李世亮  
Group Leader: LI Shiliang



李世亮 (LI Shiliang)



罗会军 (LUO Huijun)



马肖彦 (MA Xiaoyan)



吴兴俊 (WU Xingjun)



刘超 (LIU Zhao)



张文峰 (ZHANG Wenfeng)



顾宇航 (GU Yuhang)



毛会军 (MAO Huijun)



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魏元 (WEI Yuan)



王少 (WANG Shao)



王少 (WANG Shao)



王少 (WANG Shao)



王少 (WANG Shao)



王少 (WANG Shao)

## SC10

新型量子功能材料的探索研究  
Novel Superconductors and Related Functional Materials

组长: 陈根富  
Group Leader: CHEN Genfu



陈根富 (CHEN Genfu)



任治安 (REN Zhan)



单磊 (SHAN Lai)



薛面奇 (XUE Mianqi)



张帅 (ZHANG Shuai)



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张 Yingqi (ZHANG Yingqi)



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李顺良 (LI Shunliang)



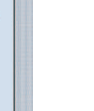
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王顺良 (WANG Shunliang)



王顺良 (WANG Shunliang)



王顺良 (WANG Shunliang)

■ 夜职职工 ■ 退休返聘人员 ■ 博士 ■ 硕士生 ■ 博士生 ■ 博士后





## Company Profile

CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd (PRIDE Cryogenics) is a high-tech company founded by China Shipbuilding Industry Corporation, 724 Institute and Nanjing Pride Technology Group. PRIDE Cryogenics is only cryogenic equipment manufacturer who masters 4K cryocooler technology in China and also the only one of the cryogenic equipment manufacturers who can supply with 4K cryocoolers, standard and customized cryostats, and large scale cryogenic systems for liquefaction of Natural Gas, Helium and Hydrogen around the world.

### • Series Of GM Cryocoolers

Gifford-McMahon (GM) cryocooler is invented by Gifford and McMahon, whose refrigeration principle is gas adiabatic expansion. Due to the high reliability, long service life, easy to control, high reliability property of GM Cryocooler, it becomes the only one of cryocoolers who has been industrialized.

CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd (Pride Cryogenics) is a high-tech company founded by China Shipbuilding Industry Corporation, 724 Institute and Nanjing Pride Technology Group. Pride Cryogenics is the only cryogenic equipment manufacture who masters 4K cryocooler technology in China and we can supply series of 4K, 10K and 77K GM cryocoolers.



### • Series Of Cryostats

CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd will spare no efforts to provide our customers with various customized cryogenic solutions, such as cryogenic systems which take cryocoolers, liquid nitrogen or liquid helium as cold source. We can meet our customers' kinds of requirements, including 300K to 1.2K temperature demand, vibration requirements less than 10nm, temperature fluctuation less than  $\pm 1\text{mk}$ , etc. We also can provide solutions to meet the demand of special shape structure, bigger work space, observation window and filter.



### • Helium Purifier And Liquefier

KDHRR series Helium liquefiers take KDE415SA-KDC6000V GM cryocooler as cold source and provide the helium liquefying rate of 15-200L/d, which consists of liquefying unit, auto-control, safety protection unit and elevator-platform. It can be used for helium liquefaction as well as re-liquefaction after liquid helium evaporation, and provides one ideal solution for liquid helium recovery.



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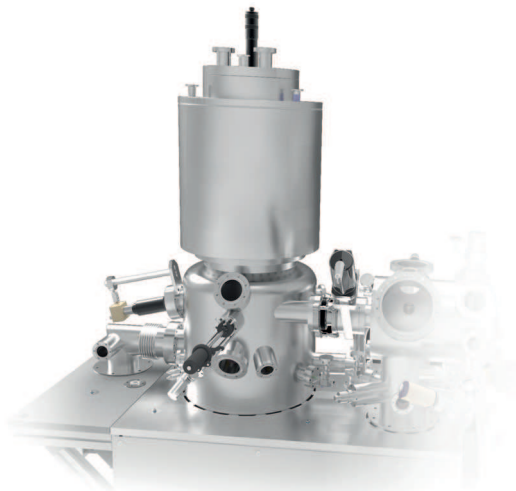
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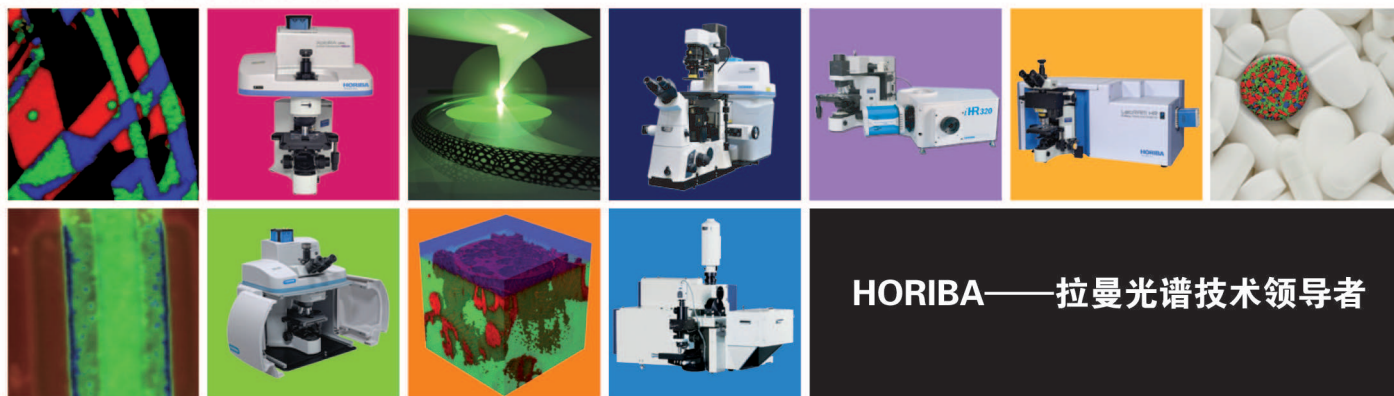
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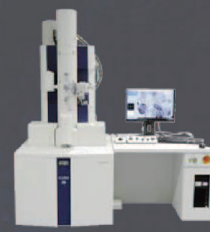
HF-3300



H-9500



HF5000



HT7700

## 扫描电子显微镜 (SEM) //////////////



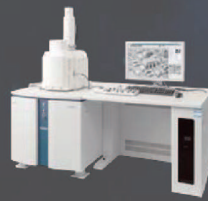
SU9000



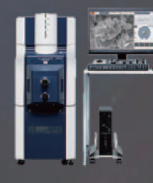
Regulus series



SU5000



SU3500



FlexSEM1000



TM4000

## 扫描探针显微镜 (SPM) //////////////



AFM 5500M



AFM 5300E



AFM 5100N

## 离子研磨仪 //////////////



Arblade5000

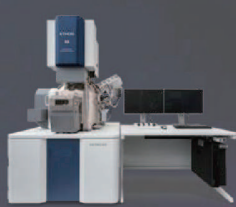


IM4000 Plus

## 聚焦离子束 (FIB) //////////////



NX9000



ETHOS



NX2000



IM4050







# 上海上创超导科技有限公司

Shanghai Creative Superconductor Technologies Co., Ltd

上海上创超导科技有限公司是在上海市政府直接指导下由上海大学、上海创业投资(集团)有限公司、上海聚惠生物医药产业开发有限公司及管理团队、技术团队等自然人股东于 2011 年 8 月共同投资组建的混合所有制企业。上创公司是集产学研用于一体的致力于第二代高温超导材料及下游应用装备研发与生产的战略型新兴产业高科技公司。

上创公司作为上海市产业化重大项目的牵头单位,于 2013 年在国内率先实现了千米级低成本第二代高温超导带材产业化及其装备、工艺与组分的国产化,可生产国内最宽、走带速度最快、成本最低的第二代高温超导带材,性价比达到国际领先水平,成为国内首家千米级第二代高温超导带材生产商。其低成本 MOD 工艺技术路线填补了国内空白,产品相继获得了工信部国内首家高温超导材料金奖、《SCIENTIFIC AMERICAN》与美国麦肯锡公司联合评选的“5UNDER5”创新奖、2017 年度上海市科技奖(技术发明二等奖)、并通过了工信部科技成果鉴定,承担了 2017 年工业强基工程项目。公司集聚了杰出的超导及其材料领域专家数十人,在 7 年时间里形成了数十项专利,正在多个领域与众多单位携手推动下游强电装备开发。同时,上创公司与上海大学合作成立了上创上大超导工程联合研发中心,并于 2014 年通过上海市唯一的高温超导重点实验室认定,为上创公司的技术持续进步获得了强有力的支持。

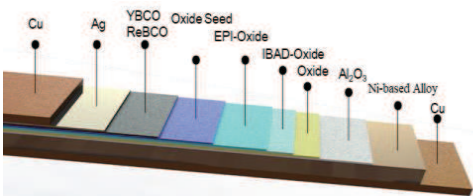
上创公司以其领先的符合产业化标准的自主工艺、装备技术路线,开创了低成本第二代高温超导材料产业化的中国道路,将在电力、交通、磁医疗康复器械、国家大科学工程等众多领域,助推下游应用企业转型升级与技术进步。

Shanghai Creative Superconductor Technologies Co., Ltd (SCSC) was established in August 2011 with the direct guidance of the Shanghai Municipal Government. SCSC is actually a mixed ownership enterprise, consisting of Shanghai University, Shanghai S & Venture Capital Group, Shanghai Poly Biomedical Industry Development Co., Ltd, as well as the management team, the technical team and personal shareholders. As a high-tech company, SCSC integrates the production, research and application of secondary-generation high-temperature superconductor (2G-HTS) tapes, and the downstream application products

As the leading company of HTS industrialization in Shanghai, SCSC routinely manufactures long lengths 2G-HTS from hundreds to kilometer class with variations in width, substrate thickness, and copper stabilizer thickness etc., also being the first manufacturer for kilometer-class 2G-HTS tapes in 2013. Now, SCSC' HTS tapes is fabricated by a series of automated, continuous processing tools for cost-effective deposition technique, i. e., metal organic deposition, being filling the domestic gap in this field. SCSC hold dozens of experts in the fields of superconductor and other related materials. During the past seven years, we achieved dozens of patents. To promote the downstream power applications, we are now cooperating with various related electric companies, and enhancing the roles of the joint R & D center between SCSC and Shanghai University, as well as the evolved Shanghai Key Laboratory of High-temperature Superconductors.

With the leading industrial standards production line, own technology and equipment, SCSC is creating a low-cost 2G HTS industrialization road in China. The application of HTS in the field of power, transportation, magnetic medical rehabilitation equipment and large scientific projects will promote the transformation and upgrading of downstream equipment business and technological progress.

## 第二代高温超导带材典型结构 Typical 2G-HTS tape architecture



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## 高温超导带材生产设备

Automated manufacturing tools for 2G-HTS Tapes



## 高温超导带材检测设备

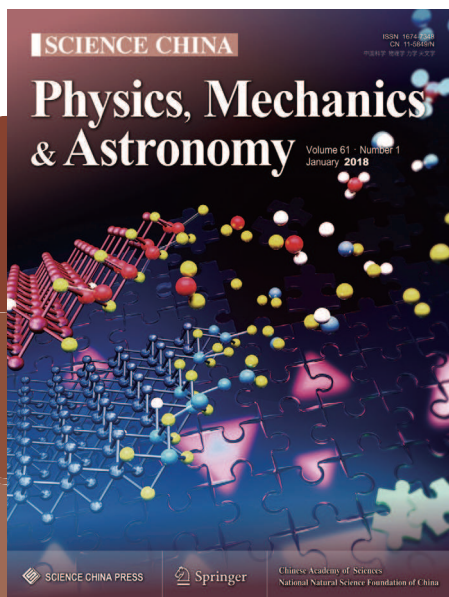
Characterization & testing facilities for 2G-HTS Tapes



- Website: <http://www.china-superconductor.com/>
- Address: No.4, Lane 2066, Wangyuan Road, Fengxian District, Shanghai, China.
- Phone: +86-021-37515861 Fax: +86-021-37515791





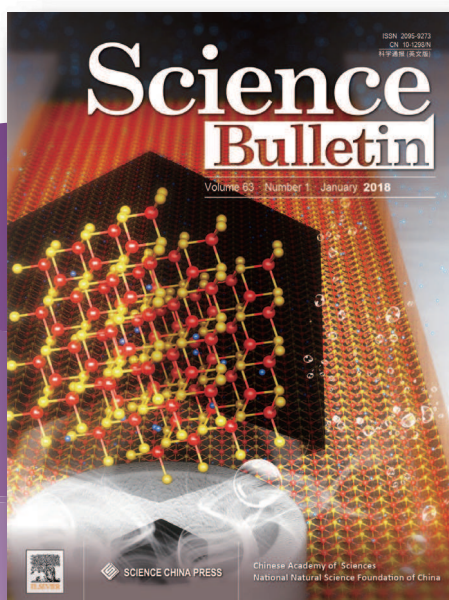


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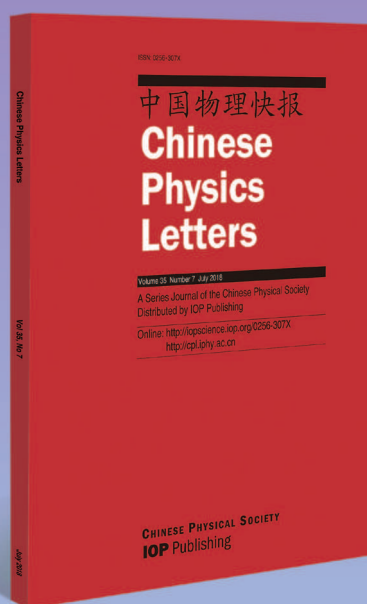


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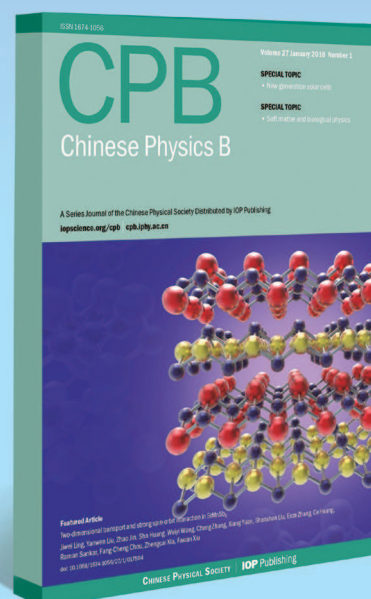
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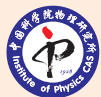


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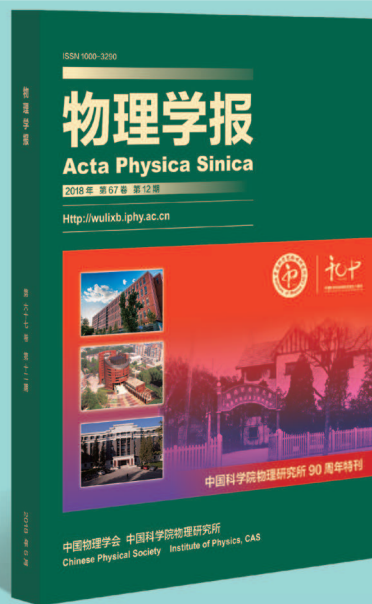
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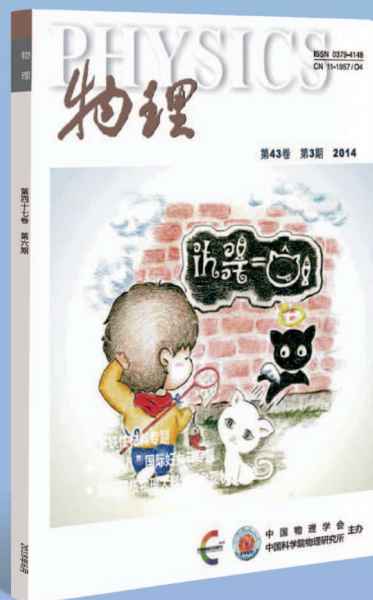
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