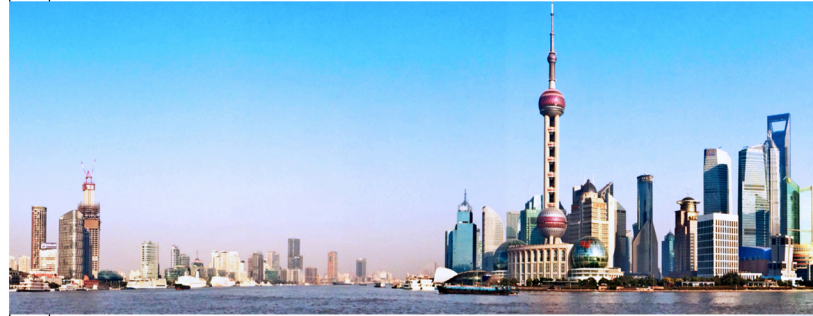


The 1st Asia-Pacific User Meeting for the  
Helmholtz International Beamline  
for Extreme Field (HIBEF2016)

# FINAL PROGRAM

June 23-24, 2016/Shanghai, China



 **中国科学院上海光学精密机械研究所**  
Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences

Add: No.390, Qinghe Road, Jiading, Shanghai, China  
Zip: 201800  
Tel: +86-21-69918005 +86-21-69918209  
Fax: +86-21-69918006  
<http://www.siom.ac.cn>

**Organized by:**  
Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences

**Co-Organized by:**  
Helmholtz-Zentrum Dresden-Rossendorf

**Conference Co-Chairs:**  
Ruxin Li (SIOM, China)  
Hideaki Takabe (HZDR, Germany)



# Welcome Message

Dear Colleagues,

It is our great pleasure to welcome all of you to Shanghai, China for attending the 1st Asia-Pacific User Meeting for the Helmholtz International Beamline for Extreme Field (HIBEF2016). The HIBEF continues to progress toward completion on the High Energy Density (HED) instrument of the European XFEL located in Hamburg, Germany. HIBEF will be a unique high energy density facility open to the international community. The first phase HIBEF/HED of the project (commissioning 2017-2018) will consist of a single large vacuum chamber with the following major integrated and synchronized capabilities:

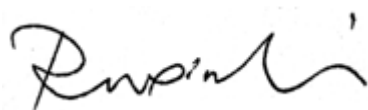
- A beam of Euro-XFEL at 10Hz;
- A 100-Joule, 10-Hz nanosecond-pulse laser (*DiPOLE*, furnished by UK);
- A 150-TW, fs-pulse, 10 Hz pulse laser;
- A pulsed 50-T magnet;
- A dynamic diamond anvil in a separate chamber.

In order to inform the community of opportunities at HIBEF and to facilitate organization of the Asia-Pacific HIBEF consortium, the 1st Asia-Pacific HIBEF User Meeting is take place in June.

The conference will be comprised of 1 welcome talk, 20 invited scientific talks, 1 poster session and 2 discussions, which covering topics of HIBEF, Target and Network.

Finally, on behalf of the Organizing Committee, we would like to express our sincere gratitude to all of you. It is you who will make the conference a great success. We hope that you can enjoy not only the exchange of scientific and technical progress but also the memorable experience of the beauty of Shanghai.

Thank you and warmly welcome again.



Ruxin Li  
Chair of LOC  
(SIOM/CAS, China)

# Committee

Helmholtz-Zentrum Dresden-Rossendorf (HZDR), Germany



## Local Organization Committee

Secretary General

Baifei Shen (SIOM, China)

Secretariat

Hongxiang Lin

Post Address: Shanghai Institute of Optics and Fine Mechanics, CAS

P.O. Box 800-211, Shanghai 201800, China

Tel: 86-21-69918655 69918005 Mobile: 86-13701903331

Website: <http://hibef.csp.escience.cn/dct/page/1>

Email: [hibef@siom.ac.cn](mailto:hibef@siom.ac.cn)



# Program of the 1st Asia-Pacific HIBEF User Meeting

(All the scientific presentations: 25 min. talk+5 min. Q&A)

**HIBEF: Helmholtz International Beamline for Extreme Fields at European XFEL**

**June 22 (Wednesday) 13:00 ~ 20:00 Registration**

**June 23 (Thursday)**

**Session I [HIBEF] Chair: Baifei Shen (09:00~10:30)**

09:00 – 09:05 Ruxin Li (SIOM) Welcome Address

09:05 – 09:10 H. Takabe (HZDR) Welcome Talk on Behalf of HIBEF

09:10 – 09:40 T. Cowan & C. Baetz (HZDR) Introduction to HIBEF Facility and Experiments

09:40 – 10:10 U. Zastra (European XFEL) HED Facility at European XFEL, Hamburg

10:10 – 10:30 Photo-Group & Coffee Break

**Chair: H. Takabe (10:30~12:00)**

10:30 – 11:00 N. Hartley (Osaka Univ.) Probing HED Plasmas with Coherent X-Rays at LCLS

11:00 – 11:30 R. Kodama (Osaka Univ.) Science with Japanese XFEL, SACLA

11:30 – 12:00 R. Cauble (LLNL) HIBEF US Consortium

12:00 – 14:00 Lunch Break

**Session II [Network-1] Chair: T. Cowan & C. Baehtz (14:00~16:30)**

- 14:00 – 14:30 Byoung-ick Cho (IBS, GIST) Creation and Probing WDM with Ultrafast X-rays
- 14:30 – 15:00 Jianfeng Li (IOFP, CAEP) Seeking Better Probe
- 15:00 – 15:30 K. Kondo (KPSI, QST) High Field Interaction Study in KPSI
- 15:30 – 16:00 B. F. Shen (SIOM, CAS) Electron Acceleration Driven by Intense X-Ray Laser
- 16:00 – 16:20 Coffee Break
- 16:20 – 16:50 Y. T. Li (IOP, CAS) Laboratory Astrophysics and High Field Physics on Laser and XFEL
- 16:50 – 18:00 T. Cowan, C. Baehtz and H. Takabe (HZDR) Discussion on HIBEF and Network
- 18:00 – 20:00 Dinner and Reception
- 20:00 – 21:00 Poster Session

**June 24 (Friday)**

**Session III [Target] Chair: Y. Sakawa (09:00~10:30)**

- 09:00 – 09:30 I. Prencipe (HZDR) Target Fabrication and EU Network
- 09:30 – 10:00 Y. Fukuda (KPSI, QST) Development and Characterization of the Hydrogen Microparticle Target for Impurity-Free >100 MeV Proton Acceleration with Advanced Laser Light Sources
- 10:00 – 10:30 K. Nagai (CRL, TITech) Mass-Productive Target Fabrication and its Delivering For High Repetition Laser
- 10:30 – 11:00 Coffee Break

**Chair: Carsten Baetz (11:00~12:00)**

11:00 – 11:30 Yansong Liu (RCLF, CAEP) The Study of Fabrication High Z Metal Coatings by Magnetron Sputtering for ICF Target

11:30 – 12:00 Jing Li (IOFP, CAEP) Synthesis and Characterization of B-C Hollow Microspheres from Pre-ceramic Polymer

12:00 – 14:00 Lunch Break

**Session IV [Network-2] Chair: Jianfeng Li (14:00~16:30)**

14:00 – 14:30 A. L. Lei (SILP, CAEP) High Energy Density Physics Research at SILP

14:30 – 15:00 Y. Sakawa (Osaka Univ.) Weibel Instability-Mediated Collisionless Shock Experiment

15:00 – 15:30 M. Chen (SJTU) High Quality Electron Acceleration and Tunable X-Ray Radiation from Laser Wakefield Acceleration

15:30 – 16:00 Y. Kuramitsu (NCU) Relativistic Laboratory Astrophysics with Intense Lasers: Nonthermal Universe

16:00 – 16:20 Coffee Break

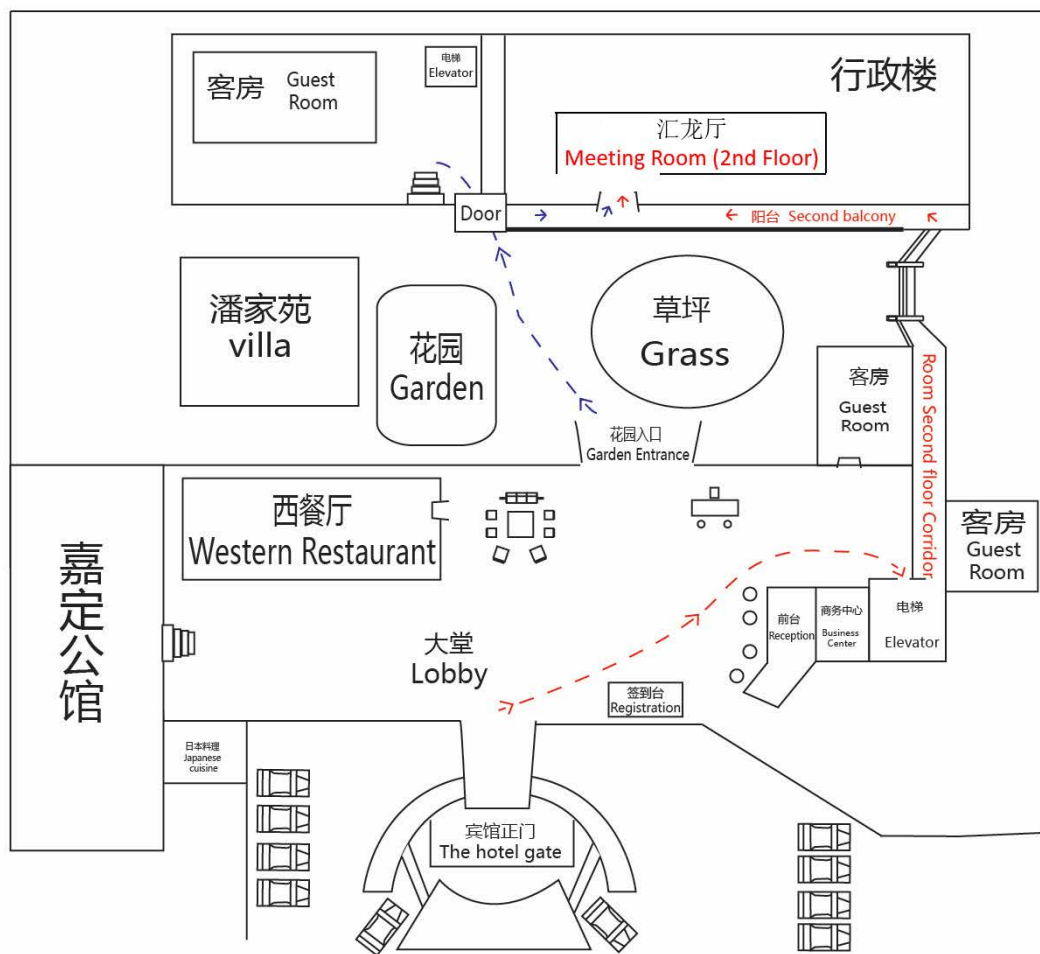
16:20 – 16:50 L. G. Huang (HZDR) Probing Ionization and Buried Layer Plasma Physics Driven by Optical High Power Lasers using XFELs

**Final Discussion and Concluding Remarks**

16:50 – 18:00 T. Cowan, C. Baetz and H. Takabe (HZDR) Final Discussion and Concluding Remarks on HIBEF, Target and Network

## Meeting Venue

The meeting will be held in Jia Ding Hotel. Jia Ding hotel is 4-star hotel in shanghai suburb area, which is located in Jiading district (100 Bo Le Road). Historical site nearby Jiading hotel are Hulun Park, Confucian Temple, Qiuxia Park which was built in Ming dynasty and Fahua Tower which was built in Song dynasty.



## Useful Information

### ◆ Information for Presiders

The presiders of each session are expected to arrive at the session room at least 10 minutes before the session starts, and to check the attendance of speakers in the session according to the schedule. Each speaker has 30 minutes for presentation and discussion. The presider may ask speakers who bring their own laptops to have compatibility test before the session begins.

### ◆ Information for Oral Sessions

Presenters at all sessions are required to report to the session chair before the session starts. The session room will be equipped with a laptop computer with one projector. Presenters are expected to load their presentations from their own CD-ROMs or USB memory sticks 15 minutes before the beginning of the session.

### ◆ Information for Poster presentation

Authors can display their materials on a poster board at 20:00 – 21:30 on June 23, 2016.

### ◆ Transportation Information

1. Pudong International Airport to Jiading

1) By Subway

Route: Take Metro Line 2 and get off at Jiangsu Road, interchange Metro Line 11 and get off at West Jiading. Get out from the Exit 2 (Currently Line 11 has two terminus stations to the direction of Jiading. Please take the one



that towards North Jiading.) and take a taxi to the hotel directly.

Time: Subway: 118minutes+Taxi: 6minutes

Charge: Subway: 10 CNY+Taxi: 12CNY

## 2) By Taxi

Distance about 72 km to the hotel in Jiading

Time: Depend on the traffic situation

Charge: About 300 CNY (Daytime) 400 CNY (Night)

## 2. Hongqiao International Airport to Jiading

### 1) By Subway

Route: Take Metro Line 2 and get off at Jiangsu Road, interchange Metro Line 11 and get off at West Jiading. Get out from the Exit 2 (Currently Line 11 has two terminus stations to the direction of Jiading. Please take the one that towards North Jiading.) and take a taxi to the hotel in Jiading directly.

Time: Subway: 69minutes+Taxi: 6minutes

Charge: Subway: 7 CNY+Taxi: 12CNY

### 2) By Taxi

Distance about 29 km to SIOM

Time: Depend on the traffic situation

Charge: About 110 CNY (Daytime) 140 CNY (Night)



