# **LT26 Final Report**

The 26<sup>th</sup> International Conference on Low Temperature Physics (LT26) was held at the Beijing International Convention Center, Beijing China during August 10 - 17, 2011.

This series of conferences are an international event held every three years, under the auspice of the International Union of Pure and Applied Physics (IUPAP) through its Commission C5 on Low Temperature Physics. LT26 is the first conferences of this series being held in China.

#### Organization

LT26 was organized by the Institute of Physics, Chinese Academy of Sciences (IOP-CAS). The Organizing Committee of LT26 was co-chaired by Zhong-Xian Zhao (IOP-CAS) and Li Lu (IOP-CAS). The Program Committee was chaired by Lu Yu (IOP-CAS). The Financial Assistance Committee was chaired by George Pickett (Physics Department, Lancaster University, UK), and helped by the conference treasurer Jianlin Luo (IOP-CAS). An advisory board and a local scientific committee were established to help on the scientific program, and to suggest topics and speakers. LT26 has also established a working group for proceedings publication, and a secretariat led by Jianlin Luo (IOP-CAS) for local organization.

#### **Participants**

There were 1072 registered participants from 45 countries. Figure 1 shows the country distribution of the participants. The total attendees were 1252 including ~100 company persons and 80 local student volunteers. There were 103 women participates, seven of them were invited speakers.

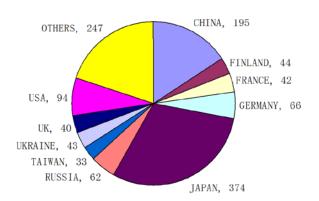


Fig. 1 Participants' Country Distribution

#### **Scientific Program**

According to the Commission C5 of IUPAP and the tradition of former LT conferences, the broad field of low temperature physics is divided into five directions in LT26, namely:

- A. Quantum Gases, Fluids and Solids;
- B. Superconductivity;
- C. Magnetism and Quantum Phases;
- D. Electronic Quantum Transport in Condensed Matter;
- E. Cryogenic Techniques and Applications.

The distribution of participants among these five directions can be seen from the numbers of abstract submission of each direction as of April 15, 2011 (Fig. 2).

Each direction has a sub-program committee to organize the sessions and to select invited speakers. The selection of speakers was based on the suggestions of the international advisory committee. By discussion and voting, the members of each sub-program committee determined the speakers of the

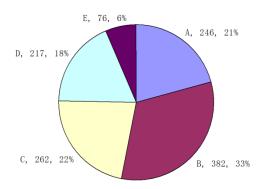


Fig. 2 Abstracts distribution among the five directions (As of April 15, 2011)

parallel sessions, as well as the potential speakers for the plenary and half plenary sessions. The speakers in the latter two sessions were discussed, balanced and finalized by the general program committee in a board meeting held in Beijing in April 2011, with the participation of the directors of all the sub-program committee.

There were 12 plenary talks, 24 half-plenary talks, 225 invited and contributed talks. These talks were distributed in two plenary sessions, eight half plenary sessions, 45 parallel sessions, and one special evening session for the celebration of the Centennial of Superconductivity.

There were also more than 1200 posters in five poster sessions.

The scientific program of LT26 can be found at the conference website <a href="http://lt26.iphy.ac.cn/">http://lt26.iphy.ac.cn/</a>, where the title and abstract of each talk can be conveniently accessed via a link from the online program table.

#### **Advisory Board**

LT26 established a large international advisory board, with 175 people from 32 countries. As of Jan. 15, 2011, over 320 suggestions on topics and/or speakers were received from 59 board members in 34 countries, as shown in Fig. 3.

#### **Registration Process, Important Dates**

Figure 4 shows the processes of registration and abstract submission with time. It can be seen that the majority of participants tended to register just before April 15, the original deadline for abstract submission (this

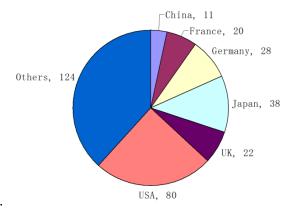


Fig. 3 Over 320 suggestions were received from 59 people in 34 countries (As of Jan. 15, 2011,)

deadline was later extended to May 15, as shown in the table below. The situation is similar to what happened for LT25.

The finalized important dates of LT26 can be found in the table below.

Online registration opening	Feb 1, 2011
Deadline for financial assistance appeal	Mar 20, 2011
Online abstract submission deadline	Apr 1, 2011
Latest notification for financial assistance status	Apr 25, 2011
Latest notification for abstract acceptance & placement	Apr 25, 2011
Early registration fees deadline	May 15, 2011
Deadline for invitation letter request	May 15, 2011
Online manuscript submission deadline (for contributed papers)	May 15, 2011
Deadline for hotel reservation with discounted rates if rooms available	Jun 15, 2011
Deadline for registration and fees payment by presenters of accepted abstracts	Jun 15, 2011
Online registration deadline	Jul 20, 2011
Conference	Aug 10-17, 2011

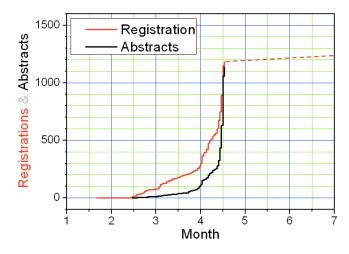


Fig. 4 The processes of registration and abstracts submission with time. April 15 was the original deadline for abstract submission. This deadline was late extended to May 15.

#### **The Prizes**

The opening ceremony of the conference was dedicated to the presentation of the London Memorial Prize, the Simon Memorial Prize and IUPAP Young Scientist Prize in Low Temperature Physics. The 2011 Fritz London Memorial Prize was awarded to Humphrey Maris, Hans Mooij and Gerd Schön. The 2011 Simon Memorial Prize is awarded to Sergey V. Iordanskii and Nikolai B. Kopnin. And the 2011 IUPAP Young Scientist Prize in Low Temperature Physics is awarded to Eunseong Kim, Max Hofheinz and Mika Sillanpää.

#### **Satellite Meetings**

LT26 has five satellite meetings.

- The International Conference on Novel Superconductivity August 4-9, 2011, National Cheng Kung University, Tainan Organizers: T. K. Lee, M. K. Wu
- New Frontiers of Low Temperature Physics
   International Conference on Ultra Low Temperature Physics ULT 2011
   August 19-22, 2011, KAIST, Daejeon, Republic of Korea

Organizers: Hu-Jong Lee, Eunseong Kim

- APCTP Conference on Localization 2011
   August 4-7, 2011, POSCO International Center, POSTECH, Pohang, Republic of Korea
- Topological insulators and superconductors
   August 18-21, 2011, Tsinghua University, Beijing
   Organizers: Carlo Beenakker, Xi Chen, Xi Dai, Aharon Kapitulnik, Qi-Kun Xue, Shou-Cheng
   Zhang
- Fudan Summer School for Condensed Matter Physics
   July 13- August 7, Fudan University, Shanghai

#### **Proceedings**

Nearly 500 conference manuscripts were peer reviewed and published in an open access journal of IOP publisher, Journal of Physics: Conference Series 400 (<a href="http://iopscience.iop.org/1742-6596/400">http://iopscience.iop.org/1742-6596/400</a>). The manuscripts are classified into five parts, in accordance with the five directions of LT26.

#### **Conference Excursions**

LT26 organized three one-day tours in Beijing on August 14, the spare day of the conference.

- Tour 1 Forbidden City- Lunch Temple of Haven
- Tour 2 Summer Palace- Lunch Yuan Mingyuan Park
- Tour 3 Great Wall Lunch Ming Tombs

LT26 also arranged a one-day tour for accompanying persons.

#### **Sponsors**

LT26 received financial aids from IUPAP, the organizer of LT25, and the commercial companies Oxford Instruments, Quantum Design. It needs to be noted that LT26 received no grant from the other sponsors listed on the website and in the conference book.

#### **Exhibitions**

There were 29 companies in 41 booths that participated in the LT26 exhibition.

### **Financial Account**

	Income				Expenses		
	Item	Estimate	Result		Item	Estimate	Result
1	Registration	630000	646847	5	BICC (rooms, poster boards, AVE, registration, exhibition, wireless)	150000 +10000 (others)	188568
2	Exhibit (booth rental)	80000	81481	6	Mem-sticks, Conf. bags, Conference books, pens, maps, etc.	75000	42857
3	IUPAP		23308	7	Proceedings (editorial office, publisher)	30000	20528
4	Other sponsors including Euro 15000 from LT25		49590	8	Welcome reception, catering, lunch, conference dinner	190000	213147
				9	Support for invited speakers	50000	72470
				10	Support for students and participants from developing countries	60000	70635
				11	Organization activities, program committee meeting in April, secretarial support, hotel for organizers, etc.	85000 +20000 (April meeting)	65467
				12	Computers, website, etc.	25000	31746
				13	Support LT27	0	15000
				14	Support London Prize	0	10000
				15	Tax	0	21566
				16	Reservation for "2014" and future	0	49242
	Total in same		001226		Total cost		001226
	Total income		801226		Total cost		801226

The price index in China ran up rapidly in recent years. Because there was not much choice to find venues that could accommodate 1500+ people in one hall yet with convenient location, we had to accept the fact that the cost of venue rental (Item 5) exceeded what we expected. In addition, the venue owner requested that no food of other sources except theirs could be taken inside the venue, so that the costs for welcome reception, catering, lunch, and conference dinner (Item 8) all exceeded than scheduled. Fortunately, we were able to save money on items 6, 7, and 11.

Item 9, Support for invited speakers: Plenary speakers got a total of RMB 204,560 through waiving the registration, covering the hotels and getting a traveling supplement. Half plenary

speakers got a total of RMB 252,000 through waiving the registration and covering the hotels. The

total amount in US dollar is 72470.

Item 10, Support for students and participants from developing countries: a total of 105

participants from 19 countries were supported, including 31 full participants and 74 students. The

total registration fees waived was RMB 272,000, and some of them got further support of RMB

173,000. The total amount in US dollar is 70635.

Item 16 is reserved for encouraging/supporting Chinese physicists and students to participate in

LT27 and other low-temperature international conferences in the future.

Li Lu, Co-Chair of LT26

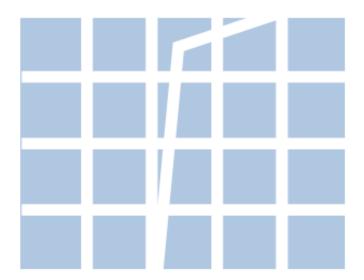
Conference Website: http://lt26.iphy.ac.cn/

Front cover of LT26 conference book.



# **LT26**

The 26<sup>th</sup> International Conference on Low Temperature Physics



August 10 - 17, 2011, Beijing International Convention Center, Beijing, China

#### Additional information

#### **Conference Committees**

# **Organizing Committee**

**Chair:** Zhong-Xian Zhao (Institute of Physics, Chinese Academy of Sciences)

**Co-Chair:** Li Lu (Institute of Physics, Chinese Academy of Sciences)

**C5 Chair:** Robert B. Hallock (University of Massachusetts)

**Secretary:** Jianlin Luo (Institute of Physics, Chinese Academy of Sciences) **Treasurer:** Jianlin Luo (Institute of Physics, Chinese Academy of Sciences)

## **Program Committee**

**Chair:** Lu Yu (Institute of Physics, Chinese Academy of Sciences)

#### **Quantum Gases, Fluids and Solids**

**Director:** Moses Chan (Pennsylvania State University)

Co-Director: Wu-Ming Liu (Institute of Physics, Chinese Academy of Sciences)

Members: Kimitoshi Kono (RIKEN)

Henri Godfrin (Néel Institute, CNRS and Université Joseph Fourier)

Randall G. Hulet (Rice University)

Immanuel Bloch (Max-Planck Institut für Quantentopik and

Ludwig-Maximilians Universität)

#### Superconductivity

**Director:** Fu-Chun Zhang (The University of Hong Kong)

**Co-Director:** Nan Lin Wang (Institute of Physics, Chinese Academy of Sciences)

**Members:** Atsushi Fujimori (University of Tokyo)

Laura H. Greene (University of Illinois at Urbana-Champaign)

John M. Tranquada (Brookhaven National Lab)

Frank Steglich (Max-Planck-Institute for Chemical Physics of Solids)

#### **Magnetism and Quantum Phases**

**Director:** Piers Coleman (Rutgers University)

Co-Director: Tao Xiang (Institute of Physics, Chinese Academy of Sciences)

**Members:** Collin L. Broholm (The Johns Hopkins University)

Hidenori Takagi (RIKEN and University of Tokyo)

Claude Berthier (Laboratoire National des Champs Magnétiques Intenses, CNRS)

S. S. Saxena (University of Cambridge, UK and FBK)

#### **Electronic Quantum Transport in Condensed Matter**

**Director:** Jukka Pekola (Aalto University School of Science and Technology)

**Co-Director:** Li Lu (Institute of Physics, Chinese Academy of Sciences) **Members:** Lieven M.K. Vandersypen (Delft University of Technology)

Jaw-Shen Tsai (NEC and Riken)

Allan H. MacDonald (University of Texas at Austin)

N. P. Ong (Princeton University)

#### **Cryogenic Techniques and Applications:**

**Director:** Yu-Sheng He (Institute of Physics, Chinese Academy of Sciences) **Co-Director:** Pertti Hakonen (Aalto University School of Science and Technology) **Members:** Tom Haruyama (High Energy Accelerator Research Organization KEK)

Blas Cabrera (Stanford University)

Jingtao Liang (Technique Institute of Physics and Chemistry, CAS) Hervé Courtois (Néel Institute, CNRS and Université Joseph Fourier)

# **Proceedings Editors**

Wu-Ming Liu, Nan Lin Wang, Tao Xiang, Li Lu, Yu-Sheng He (Institute of Physics, Chinese Academy of Sciences)

# **Financial Assistance Committee**

**Chair:** George Pickett (Physics Department, Lancaster University) **Secretary:** Jianlin Luo (Institute of Physics, Chinese Academy of Sciences)

Members: Reyer Jochemsen (Leiden University)

Mark Meisel (University of Florida)

Alexander Smirnov (Kapitza Institute for Physical Problems, Russian Academy of

Sciences)

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•		
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Sebastién	Balibar	ENS, Paris
E.	Bauer	ISSP, Vienna UoT
John	Beamish	University of Alberta
Carlo	Beenakker	UL
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Christian	Enss	Kirchhoff Inst, Heidelberg
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Igor	Fomin	Kapitza, Moscow
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Shoucheng Zhang Stanford

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Xi	Dai	IOP, CAS
Jianhui	Dai	Zhejiang University
Hong	Ding	IOP, CAS
Heng	Fan	IOP, CAS
Donglai	Feng	Fudan University
Shiping	Feng	Beijing Normal University
Zhengxiang	Gao	Peking University
Guoping	Guo	University of Science and Technology of China
Xiu Feng	Han	IOP, CAS
Tao	Hong	Shanghai Inst. Optics and Fine Mechanics, CAS

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Biaobing Jin Nanjing University

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Jianxin Li Nanjing University Shiyan Li Fudan University

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Baolong Lu Wuhan Institute of Physics and Mathematics, CAS

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