

THE 19TH INTERNATIONAL CONFERENCE ON MAGNETISM

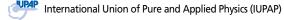
with Strongly Correlated Election Systems (SCES)

July 8 - 13, 2012 BEXCO, Busan, Korea www.icm2012.org

Hosted by

KPS The Korean Physical Society

The Korean Magnetics Society



the 19th International Conference on Magnetism with Strongly Correlated Election Systems (SCES)

July 8 - 13, 2012 BEXCO, Busan, Korea www.icm2012.org

About ICM 2012 with SCES

The major research societies in Korea, the Korean Physical Society (KPS) and the Korean Magnetics Society (KMS) are honored to co-host the 19th International Conference on Magnetism (ICM 2012), under the auspices of the International Union of Pure and Applied Physics (IUPAP). Since 1958, a series of ICM meetings have been held every three years in various parts of the world and has become recognized as one of the largest and most prestigious conferences in the field of magnetism. Previous ICM conferences were successfully held in Karlsruhe, Germany (2009), and Kyoto, Japan (2006). ICM 2009 attracted more than 1,500 people and ICM 2006, held in Asia, was attended by more than 2,000 participants along with about 100 companies participating in the exhibition.

ICM 2012 will incorporate the International Conference on Strongly Correlated Electron Systems (SCES) held annually. Especially for ICM 2012, we are planning the technical program including not only plenary session, oral and poster session, also satellite symposium that will be filled with the participation of over 500 world-leading experts from all different countries. In addition, we expect researchers and experts will contribute more than 2,200 papers in 20 sessions in ICM 2012. The papers will be published at Journal of Korea Physical Society (JKPS) and Journal of Magnetism (JOM) under strict screening procedure.

A number of Satellite Conferences are scheduled:

- 1 Korea Superconductivity Society Meeting 2012 July 5-7, 2012 in Gyeongju KyoYuk MunHwa HoeKwan, Korea
- 2 The 10th International Conference on Research in High Magnetic Field July 3-6, 2012 in Venue Ramada Plaza Optics valley Hotel, Wuhan, Hubei, China
- 3 International Conference on Heavy Electrons and Novel Quantum Phases July 14-17, 2012 in Sungkyunkwan University, Korea
- 4 The 21st International Colloquium on Magnetic Films and Surfaces (ICMFS 2012) September 24-28, 2012 in Fudan University, Shanghai, China
- 5 Spin Dynamics in Nanomagnets



Organizing Committee

Sung-Chul Shin (DGIST, Korea) Chairperson

Secretary General Kungwon Rhie (Korea University, Korea)

Program Committee Co-Chair Yoon Hee Jeong (POSTECH, Korea)

Samuel Bader (Argonne National Lab., USA)

Executive Member

*The other members are announced on the website.

Hideo Ohno (Tohoku University, Japan) Byung Il Min (POSTECH, Korea) Sang Ho Lim (Korea University, Korea)

Tae-Won Noh (Seoul National University, Korea) Yong-Seung Kwon (Sungkyunkwan University, Korea) Tuson Park (Sungkyunkwan University, Korea) Cathy Stampfl (Sydney University, Australia) Sang-Koog Kim (Seoul National University, Korea)

Publication Committee Chair

Member

Jae II Lee (Inha University, Korea)

Soonchil Lee (KAIST, Korea)

Dong Ho Kim (Yeungnam University, Korea) Joo Yull Rhee (Sungkyunkwan University, Korea)

Treasurers Co-Treasurer Bo Wha Lee (Hankuk University of Foreign Studies, Korea)

Sug-Bong Choe (Seoul National University, Korea)

Public Relation Committee Chair

Member

Chun-Yeol You (Inha University, Korea)

Hae-In Yim (Sookmyung University, Korea) Taejoon Kouh (Kookmin University, Korea) Bongjin Simon Mun (Hanyang University, Korea)

Industrial Support Committee Chair

Member

Kyung Ho Shin (Korea Institute of Science and Technology, Korea)

Derac Son (Hannam University, Korea)

Exhibition Committee Chan Yong Hwang (KRISS, Korea)

Jae-Hoon Park (POSTECH, Korea)

Local Committee Chair

Member

H. W. Kwon (Pukyung National University, Korea)

Sung-Rae Cho (University of Ulsan, Korea) Myung Hwa Jung (Sogang University, Korea) Gwan Soo Park (Pusan National University, Korea)

www.icm2012.org

July 8 - 13, 2012 BEXCO, Busan, Korea

International Advisory Committee

Gabriel Aeppli (University College London, UK)

Jun Akimitsu (Aoyama Gakuin University, Japan)

Koji Ando (AIST, Japan)

David Awschalom (University of California, USA)

Elisa Baggio-Saitovitch (CBPF, Brazil)

Mario Baibich (MCT of Brazil, Brazil)

Ganapathy Baskaran (IMSc, India)

Ernst Bauer (Vienna University of Technology, Austria)

Robert Buhrman (Cornell University, USA)

Ching-Ray Chang (National Taiwan University, Taiwan)

John Chapman (University of Glasgow, UK)

Sang-Wook Cheong (Rutgers University, USA)

Lesley Cohen (Imperial College, UK)

Alessandra Continenza (University L'Aquila, Italy)

E. Dan Dahlberg (University of Minnesota, USA)

Bernard Dieny (CEA, France)

Tomasz Dietl (University of Warsaw, Poland)

You-Wei Du (Nanjing University, China)

Albert Fert (Universite Paris-Sud, France)

Dino Fiorani (National Research Council, Italy)

Peter Fischer (Berkeley Lab, USA)

Zachary Fisk (University of California, USA)

Catherine Foley (CSIRO, Australia)

Mark Freeman (University of Alberta, Canada)

Hiroyasu Fujimori (Tohoku University, Japan)

Peter Fulde (APCTP, Germany)

Mohammad Ghafari (KIT, Germany)

Amitabha Ghoshray (SINP, India)

Laura Greene (UIUC, USA)

Peter A. Grünberg (IFF, Germany)

Ott Hans Rudolf (ETH Zurich, Switzerland)

Bret Heinrich (Simon Fraser University, Canada)

Laura Heyderman (Paul Scherrer Institute, Switzerland)

Burkard Hillebrands (Universitat Kaiserslautern, Germany)

Axel Hoffman (Argonne National Laboratory, USA)

Nguyen Huu Duc (Vietnam National University, Vietnam)

Manuel Ricardo (Ibarra Zaragoza University, Spain)

Flouquet Jacques (CEA, France)

Xiaofeng Jin (Fudan University, China)

Sung-Ho Jin (UC San Diego, USA)

Borje Johansson (Royal Institute of Technology, Sweden)

Il Koo Kang (The Korean Magnetics Society, Korea)

B. Keimer (MPI-FKF, Germany)

Zheong Gou Khim (Seoul National University, Korea)

Chul Koo Kim (Yonsei University, Korea)

Chul Sung Kim (Kookmin University, Korea)

Jürgen Kirschner (MPI-Halle, Germany)

Guangli Kuang (Chinese Academy of Sciences, China)

Budhy Kurniawan (University of Indonesia, Indonesia)

J. Raynien Kwo (National Tsing Hua University, Taiwan)

Patrick Lee (MIT, USA)

Liang Li (HUST, China)

Peter Littlewood (Argonne National Laboratory, USA)

Bo Liu (Data Storage Institute, Singapore)

Hilbert Löhneysen (KIT, Germany)

Jan Kees Maan (RU Nijmegen, The Netherlands)

Allan MacDonald (University of Texas at Austin, USA)

Sadamichi Maekawa (JAEA , Japan)

Yoshiteru Maeno (Kyoto University, Japan)

Brian Maple (University of California, USA)

Andrew Millis (Columbia University, USA)

Laurens W. Molenkamp (Wuerzburg University, Germany)

John Mydosh (Leiden University, The Netherlands)

Kevin O'Grady (The University of York, UK)

Yoshichika Onuk (Osaka Univeristy, Japan)

Martha Pardavi-Horvath (GWU, USA)

Stuart Parkin (IBM Almaden Research Center, USA)

Massimo Pasquale (INRIM, Italy)

Danilo Pescia (ETH Zürich, Switzerland) Stefania Pizzini (CNRS, France)

Sergio Rezende (UFPE, Australia)

John Sarrao (Los Alamos National Laboratory, USA)

Ivan Schuller (University of California-San Diego, USA)

Zhi-Xun Shen (Stanford University, USA)

Teruya Shinjo (IIAS, Japan)

Qimiao Si (Rice University, USA)

Manfred Sigrist (ETH Zürich, Switzerland)

John Slonczewski (IBM Research Center, USA)

Robert Stamps (UWA, Australia)

Frank Steglich (MPI-CPfS, Germany)
Takao Suzuki (University of Alabama, USA)

Henryk Szymczak (Polish Academy of Sciences, Poland)

Toshiro Takabatake (Hiroshima University, Japan)

Hidenori Takagi (University of Tokyo, Japan)

Migaku Takahashi (Tohoku University, Japan)

Koki Takanashi (Tohoku University, Japan)

Yoshinori Tokura (University of Tokyo, Japan)

Kazuo Ueda (University of Tokyo, Japan)
Chandra Varma (University of California, Riverside, USA)

Manuel Vazquez (CSIC, Spain)

Hai-Hu Wen (Chinese Academy of Sciences, China)

Yeong-Der Yao (Fu Jen University, Taiwan)

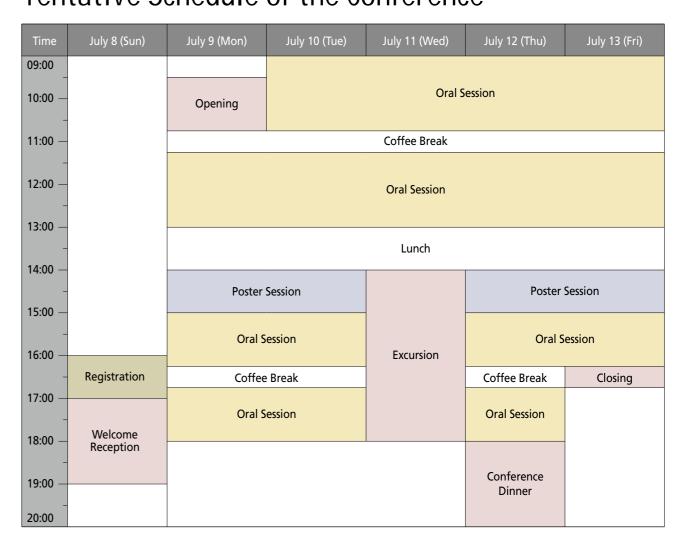
Scientific Program

Presentations will consist of plenary talks, half-plenary talks, invited talks and contributed talks. In addition, poster sessions with ample time for discussion will be conducted. The program will focus on following topics;

- Strongly Correlated Electron System (SCES) (including Superconductivity/ Multiferroics)
- 1-1 Multiferroics
- 1-2 Superconductivity
- 1-3 Topological Insulators
- 1-4 Heavy Fermion Systems1-5 Valence Fluctuations
- 1-6 Non-Fermi Liquids and Quantum Phase Transitions
- 1-7 Kondo Impurity and Kondo Lattice Systems
- 1-8 Theory of Strongly Correlated Matter
- 1-9 New Developments
- 2 Quantum and Classical Spin Systems

- 3 Magnetic Structures and Interactions
- 4 Magnetization Dynamics and Micromagnetics
- 5 Spin-Dependent Transport
- 6 Spin Electronics
- 7 Magnetic Thin Films, Particles and Nanostructures
- 8 Soft and Hard Magnetic Materials and Their Applications
- 9 Novel Materials and Device Applications
- 10 Magnetic Recording and Memories
- 11 Measuring Techniques and Instrumentation
- 12 Industrial Applications
- 13 Interdisciplinary Topics

Tentative Schedule of the Conference



www.icm2012.org

Invited Speakers

1. Plenary Speakers

Albert Fert

USA

Universite de Paris-SUD. France

*Nobel laureate in Physics (2007)

Andre Geim

University of Manchester,

*Nobel laureate in Physics (2010)

Sang-Wook Cheong

Rutgers University, USA and POSTECH, Korea

Zachary Fisk University of California, Irvine,

Sadamichi Maekawa Japan Atomic Energy Agency (JAEA), Japan

Roland Wiesendanger University of Hamburg, Germany

Klaus von Klitzing

Germany

Max-Planck-Institut FKF,

*Nobel laureate in Physics (1985)



2. Half-Plenary Speakers

Bernhard Keimer (Max Planck Institute, Germany)

Yoshinori Tokura (University of Tokyo, Japan) Hideo Ohno (Tohoku University, Japan)

Stuart Parkin (IBM Almaden Research Labs, USA)

Caroline A. Ross (MIT, USA)

LJ Heyderman (Paul Scherrer Institute, Switzerland)

Shoucheng Zhang (Stanford University, USA)

Claudia Felser (Johannes Gutenberg-Universität, Germany)

Tae-Won Noh (Seoul National University, Korea)

Yoshichika Onuki (Osaka University, Japan)

J. C. Séamus Davis (Cornell university, USA)

Hyun-Woo Lee (POSTECH, Korea)

Xiaozhong Zhang (Tsinghua University, China)

Gabriel Aeppli (London Centre for Nanotechnology, UK)

Call for Abstract

Abstract submission is now available on the conference website, www.icm2012.org. Contributions covering all aspects of magnetism are solicited. ICM2012 Program Committee cordially invites you to submit abstracts for oral and poster presentations. All abstracts will be reviewed by the program committee and assigned to appropriate oral or poster sessions.

The guidelines on the abstracts format can be found on the conference website. At least one author of each presented paper must be registered at the conference. The authors will be notified of the acceptance of the abstract on March 14, 2012

*Abstract Submission Deadline: February 14, 2012

Publication

If your abstract is accepted for presentation at the ICM2012, you are encouraged to submit your manuscript(s) for publication in a special issue of the Journal of the Korean Physical Society (JKPS) or the Journal of Magnetics (JoM). All manuscripts must be submitted via the web submission system. The system will be available starting March 14, 2012.

Presenting the manuscript in the conference does not guarantee its publication in the proceedings. Each of registered authors can submit one manuscript if the manuscript is presented in the conference. You can decide whether you wish to have your paper published in the Journal of the Korean Physical Society or the Journal of Magnetics. However the publication committee can move papers to the more appropriate journal without the consent of the authors.

More detailed manuscript submission guidelines and requirements are also announced at the website.

- *Manuscript submission opens: March 14, 2012
- *Manuscript submission Deadline: May 14, 2012

Travel Grant

1 For Students: The Conference will offer travel grants to a limited number of students. The grants are intended to partially offset travel costs for presenting students to attend the ICM2012. To be eligible for a conference travel grant, a student must be presenting a paper at the conference and the student's supervisor must submit a letter of recommendation. Only one application per research group will be accepted. Preference will be given to students who are nearing completion of their PhD graduate studies, although a limited number of Conference travel grants will be awarded to Masters and Undergraduate students. Postdoctoral fellows and non-students are not eligible.

2 For attendants from developing countries: The Conference will offer travel grants to a limited number of attendants from developing countries. The grants are intended to partially offset travel costs for presenting attendants to attend the ICM2012. To be eligible for a Conference travel grant, a paper must be presented at the Conference. Only one application per research group will be accepted.

The deadline for travel grant applications is on March 31, 2012. Applications must be submitted online, and incomplete or late applications will not be considered. All students who will be presenting a Conference paper are eligible for travel support, and subject to the conditions stated above, will be selected among the applicant pool. Applicants will be notified of the committee's decision on April 30, 2012



the 19th International Conference on Magnetism with Strongly Correlated Election Systems (SCES)

July 8 - 13, 2012 BEXCO, Busan, Korea www.icm2012.org

Accommodation

The Organizing Committee has selected hotels in different rate categories for participants of the ICM2012. Special rates have been secured by the committee but can be obtained only until June 15, 2012.

In order to secure hotel accommodations, please visit the following link, http://www.icm2012.org/hotel.htm, and download the reservation form of each hotel. Once fill out the official reservation form, send it to each hotel directly. Addition to the hotels below, more various hotels information is being posted on the conference website, simply choose the appropriate hotel for you.

No.	Grade	Hotel	Room Type	Rates (KRW)	Distance
1	Residence	Haeundae Centum Hotel (Organizing Committee Hotel)	Deluxe (Double/Twin)	120,000	2~3 min. on Foot
			Suite 1	250,000	
			Suite 2	300,000	
2	****	The Westin Chosun Busan (Official Organizing Committee Hotel)	Deluxe Park	200,000	 10 min. by Car
			Deluxe Beach	220,000	
			Executive Park	240,000	
			Executive Beach	270,000	
			Exec-Grand	400,000	
			Family Suite	600,000	
			Exec-Suite	700,000	
3	Residence	Seacloud Hotel	Superior	90,000	15min. by Car
			Executive	180,000	
4	****	Novotel hotel busan ambassador	Deluxe Room (Twin/Double)	130,000	_ 12min. by Car
			Deluxe Ocean Room (Twin/Double)	160,000	
5	****	Paradise Hotel Busan	Deluxe City View	190,000	 _ 15min. _ by Car
			Deluxe Side Sea View	210,000	
			Deluxe Sea View	230,000	
			Executive City View	230,000	
			Executive Side Sea View	250,000	
			Executive Sea View	270,000	
6	****	Lotte Hotel Busan	Deluxe	160,000	30min. by Car
			High Deluxe	190,000	
			Club Deluxe	240,000	
7	**	Hotel Riviera Haeundae	Double	80,000	12min. by Car
			Twin	80,000	
8	Youth Hostel	Arpina Buasn Youth Hoste	Bedroom for 2 Guests	92,950	15 min. on Foot
			Bedroom for 3 Guests	92,950	
			Bedroom for 4 Guests	92,950	
			Oneroom for 4 Guests	114,400	
			Condo for 5 Guests	178,750	



Transportation

Airline

Busan's accessibility by air is exceptional. Gimhae International Airport is one of the South Korea's major hubs, served by 21 airlines offering over 462 scheduled flights per week. It is only 40 minutes from downtown.

KTX

The High-speed KTX, the cutting-edge technological integration which connects the whole nation within a three-hour living area in a fast and comfortable way, is the newest and most preferred transportation.

- 1. Incheon Int'l Airport → Gimhae (Busan) Int'l Airport → BEXCO
- 2. Incheon Int'l Airport → Gimpo Domestic Airport
- → Gimhae (Busan) Int'l Airport → BEXCO
- 3. Incheon Int'l Airport → Seoul Station (KTX) → Busan Station (KTX) → BEXCO
- 4. Incheon Int'l Airport → Busan Central Bus Terminal → BEXCO

The detailed information way to the venue is posted on the page of Information> Transportation of ICM2012 website, www.icm2012.org/info2.htm.

General Information

Korea Visa

All foreign visitors entering the Republic of Korea must possess a valid passport. Delegates, except those from countries who have visa exemption agreements with Korea, should apply to a Korean diplomatic mission in their countries for visas prior to departure. For details, delegates are advised to contact the Korean Embassy in their countries, or view the Ministry of Foreign Affairs and Trade website at www.mofat.go.kr. Please contact the Conference Secretariat if you have difficulties in obtaining a visa.

Invitation Letters

Upon request the conference secretariat will be pleased to send a personal invitation for participation of the conference. It should be understood that an invitation is only to help participants raise travel funds or to obtain a visa. If a formal invitation letter is needed please contact the conference office well in advance.

Currency and Foreign Exchange

The unit of Korean currency is the Won ($\frac{1}{2}$ KRW). Coin denominations are $\frac{1}{2}$ 10, $\frac{1}{2}$ 50, $\frac{1}{2}$ 10 and $\frac{1}{2}$ 50. Banknotes are $\frac{1}{2}$ 1,000, $\frac{1}{2}$ 10,000 and $\frac{1}{2}$ 50,000. As of January 2012, the exchange rate is approximately US\$1 to KRW1144. Foreign banknotes and traveler's check can be exchanged at foreign exchange banks and other authorized money changers.

Insurance

Participants are advised to get adequate travel and health insurance before leaving their respective countries.

Weather

Korea's climate is regarded as a continental climate from a temperate standpoint and a monsoonal climate from a precipitation standpoint. The climate of Korea is characterized by four distinct seasons: spring, summer, fall, and winter. Summer in Korea is normally very humid, monsoon, and hot.



Important Dates

Abstract Submission Deadline ► February 14, 2012

Acceptance Notification ► March 14, 2012

Paper Submission Deadline ► May 14, 2012

Pre-registration Deadline ► June 15, 2012

For the latest information on the conference, including announcements, registration and accommodation, and preliminary program please visit our website at: www.icm2012.org.

Conference Secretariat