TABLE OF CONTENTS

GENERAL CONFERENCE INFORMATION

SCOPE OF THE CONFERENCE

The 21st International Conference on Magnetism (ICM2018) is sponsored jointly by the International Union of Pure and Applied Physics (IUPAP), AIP Publishing, and the IEEE Magnetics Society in cooperation with the American Physical Society. ICM2018 will be run concurrently with the International Conference on Strongly Correlated Electron Systems (SCES2018). ICM2018 is a major international conference series, held every three years, most recently in Barcelona, Busan, Karlsruhe, and Kyoto, and covers both fundamental and applied research related to magnetism. The technical program will include plenary lectures, invited and contributed oral presentations, and poster sessions, with about 1800 presentations overall. This Conference provides an outstanding opportunity for worldwide participants to share their research with the largest and broadest collection of magnetism researchers assembled in one place, and to learn about the latest results.

SAN FRANCISCO, CALIFORNIA

Welcome to San Francisco, the City by the Bay! This cool northern California city truly has it all. Nightlife, arts and culture, world-class dining and shopping, historic cable cars to take you around the city, unique neighborhoods to explore, including the Mission District, Chinatown, the Presidio, Haight-Ashbury, North Beach, Nob Hill and Union Square, and a seemingly endless list of attractions to visit in and around the Bay Area. Find out more at www.sftravel.com.

All sessions will be held at the Moscone Center South, located in the urban heart of San Francisco's downtown district and just a quick walk from the San Francisco Marriott Marquis, the Conference Hotel. A block of discounted hotel rooms has been reserved at the Marriott for $224/night, with a limited umber of student rate rooms available as well. Please support our efforts to keep registration fees low by booking your room here. Discounted rates are available until June 15, 2018 at www.icm2018sf.org under "Travel Guide/ Hotel Information".

SPECIAL CONFERENCE SESSIONS

Pre-Conference Tutorials

Pre-registration is NOT required for these events.

Computational Micromagnetics with JOOMMF

Sunday, July 15 1:30 pm - 5:00 pm
Room 307/308, Level Three

Speakers: Marijan Beg, *European XFEL GmbH*

This workshop will provide a brief introduction to computational micromagnetics. We will introduce and teach the use of a Python interface to drive the OOMMF simulation package. At the beginning, we will provide a lecture style introduction, which is followed by practical exercises where attendees will have an opportunity to carry out small micromagnetic calculations, modify given examples and ask more specific questions.

Entrepreneurship Tutorial—*From Concepts to Products: Pathways to Success*

Sunday, July 15 1:30 pm - 3:00 pm
Room 104, Lobby Level

Supported in part by:

Moderator: Tom Coughlin, *Coughlin Associates*

Speakers: Han Jin, *Lucid VR*
Andrew Kent, *Spin Transfer Technologies*

Here in Silicon Valley, starting new companies is a way of life. Many software projects require minimal capital investments, but that is often not the case with hardware. So, how do you get started if you have an idea for a hardware product and how do you fund your venture and find customers? Learn from our panelists how they tackled the challenges of taking hardware products to market and what they learned along the way.

Resume Writing Tutorial—*Presenting Your Best Self to Hiring Managers in Industry, Government and Academia*

Sunday, July 15 3:30 pm - 5:00 pm
Room 104, Lobby Level

Speakers: Liesl Folks, *University of Buffalo*
Tom Thomson, *University of Manchester*

If you'd like a job at some point, it is almost a certainty that you will need to write a resume or curriculum vitae that will make a compelling case for you to be interviewed. Learn from our panelists what works and what mistakes they regularly see on resumes.

Opening Session

Monday, July 16 8:00 am - 8:30 am
Esplanade Ballroom, Upper Mezzanine Level

Chair: Kai Liu, *University of California, Davis and Georgetown University*

Welcome: Allan MacDonald, General Chair, ICM2018
University of Texas at Austin

Presentation of the 2018 IUPAP Magnetism Award and Néel Medal:

Presented by: Burkard Hillebrands, Chair, IUPAP C9 Commission, *Technische Universität Kaiserslautern*

Dr. Samuel D. Bader, *Argonne National Laboratory*

Prof. Ramamoorthy Ramesh, *University of California, Berkeley*

Prof. Kang L. Wang, *University of California, Los Angeles*

Presentation of the 2018 IUPAP Young Scientist Prize in Magnetism:

2016: **Wei Han,** *Peking University*
2017: **Luqiao Liu,** *Massachusetts Institute of Technology*
2018: **Shinichiro Seki,** *RIKEN*

Prize Talks

Monday, July 16 8:30 am - 10:00 am
Esplanade Ballroom, Upper Mezzanine Level

Chair: Burkard Hillebrands, Chair, IUPAP C9 Commission, *Technische Universität Kaiserslautern*

Dr. Samuel D. Bader, *Argonne National Laboratory*

"For outstanding and sustained experimental contributions to the field of magnetic surfaces, films, and nanostructures".

AA-01 The Marriage of Ferromagnetism and Superconductivity: A New Twist.

Prof. Ramamoorthy Ramesh, *University of California, Berkeley*

"For groundbreaking discoveries in novel multiferroic and magnetoelectric materials and their applications in future technologies".

AA-02 Electric Field Control of Magnetism

Prof. Kang L. Wang, *University of California, Los Angeles*

"For the discovery of chiral Majorana fermions and outstanding contributions to topological spintronics".

AA-03 Topology in Spintronics: Majorana, etc.

Symposia

1:30 pm - 3:00 pm
Esplanade 157, Upper Mezzanine Level

Monday **D1** Spin Currents and Magnonic Condensates in Magnetic Insulator
Chair: Oksana Chubykalo-Fesenko, *Instituto de Ciencia de Materiales de Madrid*

Tuesday **J1** Computing with Spintronic Devices
Chair: Chih-Huang Lai, *National Tsing Hua University*

Thursday **S1** New Routes and Materials Toward Quantum Criticality
Chair: Stephen Julian, *University of Toronto*

Friday **Y1** Emerging Phenomena in Van der Waals Magnets
Chair: Steven May, *Drexel University*

Plenary Sessions

11:30 am - 12:30 pm
Esplanade Ballroom, Upper Mezzanine Level

Tuesday **I1-01** Spin-Orbit Torques: Discoveries, Advances and Possibilities
Chair: Allan MacDonald, *University of Texas at Austin*
Speaker: Robert Buhrman, *Cornell University*

Wednesday **O1-01** Antiferromagnetic Spintronics
Chair: Laura Heyderman, *Paul Scherrer Institute*
Speaker: Tomas Jungwirth, *Academy of Sciences of the Czech Republic*

Thursday **R1-01** Topological Weyl Magnets: From Multipole to Room Temperature Functions
Chair: Leon Balents, *University of California at Santa Barbara*
Speaker: Satoru Nakatsuji, *The University of Tokyo*

Friday **X1-01** Hidden Magnetic Order in Multiferroics and Superconductors
Chair: Mark Stiles, *National Institute of Standards and Technology*
Speaker: Nicola Spaldin, *ETH Zurich*

Lunch with the Experts

Tuesday, July 17 and Thursday, July 19
12:30 pm - 1:30 pm
Rotunda, Upper Mezzanine Level

Students and post-doctoral researchers who have registered in advance for this event will enjoy an intimate lunch and discussion with their selected expert. This event will be held on Tuesday and Thursday in the Rotunda on the Mezzanine Level of the Moscone Center. Lunch will be served. **You must register in advance to attend this event as space is extremely limited.**

Experts:

Tuesday
James Analytis, *University of California at Berkeley*
Wei Han, *Peking University*
Jean Anne Incorvia, *University of Texas at Austin*
Natalia Perkins, *University of Minnesota*

Thursday
Paulo Freitas, *International Iberian Nanotechnology Laboratory*
Christian Ruegg, *Paul Scherrer Institut and the University of Geneva*
Suchitra Sebastian, *Cambridge University*
Yayoi Takamura, *University of California at Davis*
Roser Valenti, *University of Frankfurt*
Stephen Wilson, *University of California at Santa Barbara*

Student Presentation Award Session and Networking Reception

Thursday, July 19
6:30 pm - 8:30 pm
Esplanade 160 and Rotunda, Upper Mezzanine Level

Supported by:

Attendees are invited to attend a special session featuring the finalists for the Best Student Presentation Award, sponsored by Evico Magnetics. This competition recognizes and encourages excellence in graduate studies in the field of magnetism. There will be a US $1000 one-year fellowship for the winner and US $250 one-year fellowships for the remaining finalists. Each finalist will give a 10-minute talk, which will be evaluated by a panel of judges.

Immediately following this session, there will be a networking reception with light refreshments, and the winner of the Best Student Presentation Award will be announced at 8:00 pm. **Don't forget to come support the students!**

Co-Chair: Alexander Grutter, *National Institute of Standards and Technology*

Co-Chair: Julia Mundy, *Harvard University*

Finalists:

Jiarui Li, *Massachusetts Institute of Technology*

Y8-04 Imaging Scale-invariant Magnetic Textures in a Strongly Correlated Oxide

Alejandro Ruiz, *University of California at Berkeley*

B14-06 Hidden Ferromagnetism in the Kitaev Honeycomb Iridates

Lourdes Marcano Prieto, *Universidad del País Vasco*

L1-11 On the Magnetic Anisotropy of Co-doped Magnetosome Chains

Michael Harder, *University of Manitoba, Winnipeg*

Q2-08 Level Attraction and Synchronization in Hybridized Magnon-Photon Systems

Libor Šmejkal, *Johannes Gutenberg University*

G6-01 Classification of Topological Antiferromagnets for Spintronics

Closing Session

Friday, July 20
5:00 pm - 5:30 pm
Esplanade 152, Upper Mezzanine Level

Chair: Allan MacDonald, General Chair, ICM2018
University of Texas at Austin

SPECIAL CONFERENCE EVENTS

Welcome Reception—Neighborhoods of San Francisco

Sunday, July 15
5:00 pm - 6:30 pm
Moscone Center South Lobby

Conference attendees are invited to attend a Welcome Reception, sponsored by the IEEE Magnetics Society. This reception will be held immediately following the Tutorial Sessions at the Moscone Center in beautiful downtown San Francisco. The Moscone Center is located just a five-minute walk from the San Francisco Marriott through the blooming Yerba Buena Gardens. You will enjoy an authentic taste of the city of San Francisco, with samplings from its most famous neighborhoods such as North Beach, Chinatown and Ghirardelli Square. And of course, there will be a fantastic selection of California wines and local beers on tap. Don't miss this kickoff event—it's a great way to start your week at ICM2018.

Women in Magnetism Networking Event

Monday, July 16
6:30 pm - 8:00 pm
Rotunda, Upper Mezzanine Level

Expand your professional network! Don't miss the Women in Magnetism Networking Event, sponsored by the IEEE Magnetics Society. This is an opportunity to become acquainted with women in the profession and to discuss a range of topics including leadership, work-life balance, and professional development. All graduate students, researchers and retirees are encouraged to attend.

Banquet at the Exploratorium

Tuesday, July 17
7:00 pm - 10:00 pm
Exploratorium at Pier 15
www.exploratorium.edu

ICM2018 attendees and their guests are invited to attend a banquet event at the famed **Exploratorium** at Pier 15. This is an event not to be missed! You will have private access to all of the amazing hands-on exhibits in the Bechtel Central Gallery of the museum, heralded as an ongoing exploration of science, art and human perception. Entertainment will be provided by the daring aerialists from Earth Circus Productions. **Don't miss this exciting night on Pier 15!**

TICKET REQUIRED. This event is **NOT** included in your Conference registration or Companion Ticket. You must purchase a ticket to attend. Tickets are $100 each, and $60 for students.

Magnetism as Art Showcase

ICM2018 will host a Magnetism as Art Showcase to highlight the beauty of magnetism and magnetic materials. Selected submissions will be displayed at the Conference, and all submissions will be posted to the Conference Facebook Page. Prizes will be awarded by a panel of judges as well as by popular vote. The winners will be recognized at the Student Presentation Award Session on Thursday evening. **Don't forget to take a look at the selected submissions on display and vote for your favorite! Submit your ballot by 12:30 pm on Thursday, July 19 for the Peoples' Choice Award.**

Bierstuben

Join us Monday, Tuesday, and Thursday evenings from 5:00 pm - 6:30 pm in the Exhibit Hall for a taste of the best local beers as you network among the poster sessions and exhibits.

Coffee and Tea

Complimentary coffee and tea service will be available daily in the Moscone South Lobby and also in the Exhibit Hall.

REGISTRATION

The Registration Desk, located in the Moscone South Lobby, will be open during the following hours:

Sunday	12:00 pm - 6:30 pm
Monday	7:00 am - 6:30 pm
Tuesday	7:00 am - 6:30 pm
Wednesday	8:00 am - 12:30 pm
Thursday	8:00 am - 6:30 pm
Friday	8:00 am - 3:30 pm

Onsite Registration Rates:

Full	$830 USD
Student	$395 USD
Companion Ticket*	$225 USD

*Companion Tickets include access to the Welcome Reception, daily coffee, breaks, and Bierstuben at the Moscone Center. Companion Tickets **DO NOT** include access to the Banquet at the Exploratorium. Those tickets must be purchased separately. Banquet Tickets are $100 each, and $60 for students.

CAMERA, CELL PHONE AND VIDEO RECORDING POLICIES

By you: Recording (audio, video, still photography, etc.) of sessions is strictly prohibited whether intended for distribution, publication, copyright, or personal use. Attendees violating this policy may be asked to leave the session.

Of you: By registering for this meeting, all attendees acknowledge that they may be photographed by the ICM2018 personnel while at events, and that those photos may be used for promotional purposes, in ICM2018 publications and websites, and on social media sites.

SESSION CHAIRS

Poster and Oral Session Chairs should attend the Session Chair Breakfast at 7:15 am **on the day of their session** in Esplanade 151 on the Upper Mezzanine Level. Timer slides will be pre-loaded onto the session laptops in each oral session room, however, Session Chairs should bring their laptop as well to be used as a backup for presentations if needed.

SPEAKER REHEARSAL ROOM

Presenters may use the Speaker Rehearsal Room in Room 312 on Level 3 to practice their presentations with the provided audiovisual equipment (LCD projector and screen). This room is available Sunday at 1:00 pm until Friday at 1:00 pm.

ORAL SESSIONS

Ten simultaneous oral sessions will be held Monday through Friday.

Speakers must bring their presentation on their own laptop computer. If you cannot bring your laptop with you for any reason, you should alert your Session Chair and arrange to share your presentation by email.

In each session room there will be a multi-port switchbox so that speakers can connect their laptop during the question period of the previous speaker. Each speaker will be responsible for promptly connecting to the projector and switching to the correct input port. **The presentation timer will begin immediately after the introduction by the Session Chair. No extra time will be given in the event of technical difficulties as session timing must be strictly maintained.** Speakers are strongly encouraged to test their laptop connections and screen resolution settings in the Speaker Rehearsal Room prior to the start of the session.

If audiovisual assistance is needed during an oral session, Session Chairs should contact the audiovisual technician located in the hallway outside their session rooms. Contact information for technicians will also be available on the Session Chair's table at the front of the room.

POSTER SESSIONS

Poster sessions will be held Monday through Friday in the San Francisco Ballroom.

Poster presenters should set up their materials at least 30 minutes before their session starts and must be present at their poster for the duration of the session. Presenters must remove all of their materials promptly at the end of their session. Any poster materials not removed will be discarded.

BEST POSTER PRESENTATION AWARD

Supported by:

APS physics GMAG MAGNETISM

All posters that meet the requirements and guidelines described on the Conference website are eligible for this award. It is required that the presenting author be registered for the Conference and be present for the duration of the poster session to present details and answer questions. Nominations will be made by the Poster Session Chairs. Selections will be based on the level of the research, quality of the poster, and clarity of the presentation. The award will be given at the end of each poster session. The winning presenters will be given a commemorative prize and certificate. A ribbon will also be attached to the winning posters which will be prominently displayed for the remainder of the Conference.

PUBLICATIONS

The Conference papers will be published as special issues of *AIP Advances* in late 2018 and *IEEE Transactions on Magnetics (TMAG)* in February 2019. Entire sessions will be assigned to one of these journals by the Publication co-chairs. Invited papers will be published in the Journal to which their session is assigned by the publication co-chairs.

AIP Advances is a peer-reviewed, fully open access, multidisciplinary journal covering all areas of the physical sciences (experimental, theoretical, and applied). AIP Advances' inclusive scope and publication standards make it an excellent outlet for scientists across the physical sciences. To learn more about the journal, visit aipadvances.aip.org. All AIP Advances papers will be **open access at no additional cost to the authors.**

IEEE *Transactions on Magnetics* publishes research in science and technology related to the basic physics and engineering of magnetism, magnetic materials, applied magnetics, magnetic devices, and magnetic data storage. Conference related papers are reviewed to the same high standards as regular submissions to the journal. Details of the journal can be found by visiting http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=20.

To check the status of their papers, authors should refer to the PXP submission site at http://mmm.peerx-press.org. For all other publications questions, visit the Conference Office in Room 310.

STUDENT TRAVEL SUPPORT

Travel grants are offered to a limited number of students who are presenting at the Conference. Students must apply online and the grants are used to offset travel expenses. This program is for students who have not previously received a Conference or IEEE Magnetics Society travel grant. Only one application per research group is accepted. Postdoctoral fellows and non-students are not eligible. The recipients for this Conference have already been informed about their selection.

CHILD CARE SUPPORT

Child care grants are offered to a limited number of attendees who are bringing young children to the Conference or who incur extra expenses in leaving their children at home. The recipients for this Conference have already been informed about their selection and are required to submit receipts for their reimbursable expenses.

CONFERENCE ORGANIZATION

PLANNING COMMITTEE

General Chair ..... Allan MacDonald
Secretary General ..... Liesl Folks
Co-Treasurers ..... Petru Andrei
Julie Borchers
Program Chair ..... Mark Stiles
Associate Program Chairs ..... Leon Balents,
Laura Heyderman, Hideo Ohno

Program Committee Members:

Topic 1: Strongly Correlated Electrons Systems (SCES) • Stephen Julian, Dai Aoki, Federico Becca, Silke Buehler-Paschen, Premi Chandra, Piers Coleman, Hae-Young Kee, Mireille Lavagna, Alessandra Lanzara, Yuji Matsuda, Catherine Pépin, Srinivas Raghu, Qimiao Si, Kai Sun, Joe Thompson, Ashvin Vishwanath, Fa Wang, Steffen Wirth, Huiqiu Yuan

Topic 2: Spin-Systems and Magnetic Structures • Steven May, Christian Batista, Collin Broholm, Gang Chen, Rebecca Flint, Tatiana Guidi, Kristjan Haule, Bella Lake, Philippe Mendels, Hatsumi Mori, Masaki Oshikawa, William Ratcliff, Kate Ross, Matthew Stone, Hirokazu Tsunetsugu, Roser Valenti, Andrew Wills, Stephen Wilson, Xiaoshan Xu, Igor Zaliznyak

Topic 3: Spintronics, Magnetization Dynamics, and Micromagnetics • Oksana Chubykalo-Fesenko, Antonio Azevedo, Christian Back, Vincent Baltz, Gerrit Bauer, Sug-Bong Choe, Andrii V. Chumak, Giovanni Finocchio, Pietro Gambardella, Julie Grollier, Masamitsu Hayashi, Axel Hoffmann, Andrew Kent, Alexey Kimel, Hitoshi Kubota, Xinyu Liu, Aurelien Manchon, Eduardo Martínez, Andrzej Maziewski, Hiroshi Naganuma, Junsaku Nitta, Teruo Ono, Masashi Shiraishi, Tom Silva, Yaroslav Tserkovnyak, Maxim Tsoi, Jianhua Zhao

Topic 4: Nanomagnetism • Peter Fischer, Jayasimha Atulasimha, Andris Bakuzis, Jeyadevan Balachandran, Kristen Buchanan, Everett Carpenter, Jose de la Venta, Haifeng Ding, Cindi Dennis, Hans Fangohr, Amalio Fernandez Pacheco, Ioanna Giouroudi, Gerardo Goya, Mitsuteru Inoue, David Lederman, Vitaliy Lomakin, Ferran Macià, Chris Marrows, Stéphane Mangin, Martina Müller, Volker Neu, Vivian Ng, Charudatta Phatak, Francesco Pineider, Dirk Sander, Ivan Schuller, Walther Schwarzacher, Ralph Skomski, Robert Stamps, Tom Thomson, Dan Wei, Jürgen Weizenecker, Yizheng Wu

Topic 5: Magnetic Materials and Technologies • Chih-Huang Lai, Elke Arenholz, Eric Fullerton, Donald Gardner, Oliver Gutfleisch, Ravi Hadimani, Atsufumi Hirohata, Kyung-Jin Lee, Yossi Paltiel, Valerie Pierre, Stefania Pizzini, Philip Pong, Bethanie Stadler, Thomas Schrefl, Nian X. Sun, Rie Y. Umetsu, Zhidong Zhang

Publication Co-Chairs ..... Hari Srikanth
and Thomas Thomson
Publications Editors ..... Eun Ah Kim, Chris Binek,
Alina Deac, Nicola Morley,
Mike Osofsky, Davide Peddis,
Monserrat Rivas, Ken-ichi
Uchida, Thomas Woodcock
Industry Liaison ..... Tiffany Santos
Publicity Chair ..... Philip Pong
Best Student Presentation
Awards Co-Chairs ..... Alexander Grutter
and Julia Mundy
Best Poster Presentation
Awards Chair ..... Barry Zink
Student Travel/Child Care
Grant Awards Chair ..... Barry Zink
Magnetism as Art Showcase Chair ... Yayoi Takamura
Conference Manager ..... Molly Bartkowski
Abstracts/Publications Manager ..... Regina Mohr
Exhibits Manager ..... Jennifer Fiske

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IEEE Magnetics Society ..... Rudolf Schäfer
IUPAP ..... Burkard Hillebrands

#ICM2018

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ADDITIONAL INFORMATION

To join our mailing list, visit www.icm2018sf.org or contact info@icm2018sf.org.

EXHIBITORS *(As of June 1, 2018)*

An exhibition of magnetism-related services, equipment, materials, and software will be held at the Moscone Center:

Monday	10:00 am - 11:30 am 1:30 pm - 6:30 pm
Tuesday	10:00 am - 11:30 am 1:30 pm - 6:30 pm
Wednesday	10:00 am - 11:30 am
Thursday	10:00 am - 11:30 am 1:30 pm - 6:30 pm

APS physics PHYSICAL REVIEW JOURNALS

Booth 19

The American Physical Society (APS) is a nonprofit membership organization that publishes the Physical Review journals, the world's most widely read physics research and review journals. Throughout 2018, APS is celebrating the 125th anniversary of the Physical Review journals. Please stop by our booth in the exhibit hall to learn more about the prestigious collection of journals.

Contact: Kenneth Newberry
Email: Newberry@aps.org
Website: www.aps.org

attocube WITTENSTEIN Group

Booth 1

attocube is the technology leader for cryogenic measurement instrumentation, including low vibration closed-cycle cryostats, a cryo-optical table and various low temperature & high magnetic field compatible measurement inserts, allowing for research techniques such as AFM, MFM, SHPM, confocal & RAMAN microscopy. In cooperation with SPECS Zurich, attocube now offers a powerful all-in-one solution for transport measurements. The software integration of the dry cryostat attoDRY2100, a 3D sample rotator and a powerful measurement electronic (Nanonis Tramea™) combines generic, yet automatable measurement routines with unprecedented speed and signal quality. Nano-precise piezo positioning stages and laser displacement sensors with picometer resolution complete attocube's portfolio.

Contact: Johanna Kelkile
Email: info@attocube.com
Website: www.attocube.com

CAMBRIDGE UNIVERSITY PRESS

Booth 11

Cambridge University Press's publishing in books and journals combines state-of-the-art content with the highest standards of scholarship, writing and production. Visit our stand to browse new titles, available at a 20% discount, and to pick up sample copies of our journals.

Contact: Kamini Ramphal
Email: kramphal@cambridge.org
Website: www.cambridge.org/academic

ELSEVIER

Booth 20

Elsevier is a world-leading provider of information solutions designed to enhance the performance of science and technology professionals. Amongst the almost 2,960 journals (most of which offer open access options) and 48,300 book titles we publish, no fewer than 100 journals are in Physics or a related field. Visit us at the Elsevier booth and meet our publisher to ask any questions you may have about submitting research to our journals. In addition, learn more about our author services, open access options and content innovation.

Contact: Kinga Rietveld
Email: k.rietveld@elsevier.com
Website: www.elsevier.com/physics

HINDS™ INSTRUMENTS

Booth 3

Hinds Instruments' products for Magneto Optic Kerr Effect (MOKE) experiments are the Hysteresis Looper and MOKE kits. The Hysteresis Looper allows the user to plot hysteresis loops and determine coercivity values within the magnetic field range of 0 to 2400 Gauss. The MOKE kit options include photo detectors, lock-in amplifiers, and photoelastic modulators (PEMS) that allow experimenters to build their own MOKE system. A Polar orientation module is available for those working with ultra low-temperature environments. With all options the robustness and convenience of Hinds PEM technology allows sensitive detection of magneto-optic signals produced by thin magnetic films.

Contact: Connie Wimmer
Email: sales@hindsinstruments.com
Website: www.hindsinstruments.com

IOP Publishing

Booth 6

IOP Publishing is a society-owned scientific publisher, providing impact, recognition and value for the scientific community. Wholly owned by the UK Institute of Physics, we work closely with researchers, academics, and partners worldwide to produce academic journals, ebooks, conference series, and digital products, covering the latest and best research in the physical sciences and beyond.

Contact: Lisa Searle
Email: lisa.searle@iop.org
Website: www.iop.org

Lake Shore CRYOTRONICS

Booth 4

A leading innovator in solutions for measuring materials under controlled magnetic field and temperature conditions, Lake Shore offers electromagnet-based VSMs for characterizing magnetic properties over a 4.2 K to 1273 K temperature range and fields to 3.42 T. Among these: the award-winning 8600 Series VSM, which combines high sensitivity (15 nemu), measurement speed (10 ms/pt), and simple operation in a system capable of characterizing a broad range of materials with unprecedented ease. Also available: magnetic test and measurement instruments, including teslameters/gaussmeters, and cryogenic probe stations with integrated vertical and horizontal field magnets for on-wafer magneto-transport, DC, RF, or microwave measurements.

Contact: Brad Dodrill
Email: sales@lakeshore.com
Website: www.lakeshore.com

Kurt J. Lesker Company

Booth 2

A fully integrated manufacturer of thin film deposition systems, vacuum components and materials. Our new High-Power IMPULSE™ Magnetron (HiPIM's) power supply and TORUS® Mag Keeper magnetron combination delivers films with better adhesion, improved grain structure and fewer defects than conventional sputtering. This advanced cathode is also available in an ultra-high vacuum version. Lesker's thin film deposition systems include the improved Pro-Line PVD 75, enhanced for flexibility of layout, deposition, operation and expansion. Our eKLipse™ control software makes recipe development and execution easy. Materials for research include: Co, Fe, Ir, Ni, Pt; and alloys and oxides such as Permalloy, $BiFeO_3$, YIG, FeCoMn, MoS_2, Fe_3O_4, and LaSrMnO.

Contact: Bill Zinn
Email: billz@lesker.com
Website: www.lesker.com

MicroSense

Booth 12

MicroSense is a leading manufacturer of magnetic measurement systems for both research and production quality control. MicroSense VSM have the highest Signal to Noise Ratio (SNR) and the highest magnetic field in the smallest footprint of any horizontal field VSM and the largest number of available options including MOKE, FMR, MR, Torque etc. MicroSense also offers a range of non-contact, in-line (full wafer or disk) research and production magnetic metrology systems for in-plane and perpendicular MRAM, hard disk and recording head process control. MicroSense was the first to introduce a 300 mm ready non-contact magnetic property measurement tool for MRAM.

Contact: Erik Samwel
Email: esamwel@microsense.net
Website: www.microsense.net

MTI KJ GROUP

Booth 5

MTI Corporation has been providing a total solution for materials research labs since 1995. MTI supplies ceramic, crystal, metallic substrates from A-Z and Nano-powder. MTI also provides laboratory R&D equipment including alloy melting, casting, annealing, sectioning, polishing, mixing machines, high temperature muffle and tube furnaces, pressing machines, film coaters, high vacuum systems, high pressure furnaces, RTP furnaces, hydrogen furnaces, as well as compact XRD/XRF for Metallographic analysis and the Amorphous Metallic Material Research Equipment.

Contact: Andy Huang
Email: andy@mtixtl.com
Website: www.mtixtl.com

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nanoscan

Booth 8

NanoScan is a member of the IonTof group of companies. We are specialized in high-vacuum Scanning Probe Microscopes and our flagship microscope, the VLS-80, offers a high-end standalone solution for high-vacuum SPM. It runs all SPM modes of imaging and is equipped with two phase-locked loops to enable dual frequency modes. Magnetic imaging is a key strength of the VLS-80, with 550 mT out-of-plane, 200 mT in-plane magnetic field options and 10-nm lateral resolution guaranteed; an industry best. The large stage offers excellent positioning repeatability over the complete range of 100mm x 100mm.

Contact: Marco Corbetta
Email: m.corbetta@nanoscan.ch
Website: www.nanoscan.ch

OXFORD INSTRUMENTS

The Business of Science®

Booth 10

Oxford Instruments NanoScience designs, supplies and supports market-leading research tools that enable quantum technologies, new materials and device development in the physical sciences. Our tools support research down to the atomic scale through creation of high performance, cryogen free low temperature and magnetic environments, based upon our core technologies in low and ultra-low temperatures, high magnetic fields and system integration, with ever-increasing levels of experimental and measurement readiness. Oxford Instruments NanoScience is a part of the Oxford Instruments plc group.

Contact: Phil Pickering
Email: phil.pickering@oxinst.com
Website: www.oxinst.com

OXFORD UNIVERSITY PRESS

Booth 18

Oxford University Press is a publisher of some of the most respected and prestigious books and journals in the world. Visit our stand to browse books and to pick up sample copies of our journals or visit us online.

Contact: Xavier McCutcheon
Email: gab.exhibitions.us@oup.com
Website: www.oup.com

Quantum Design International

Booth 16

Quantum Design manufactures automated material characterization systems providing temperatures from 0.05 to 1000 K, magnetic fields up to 16 tesla, and a wide range of measurements, including: magnetometry, electrical transport, heat capacity, thermal transport, Raman spectroscopy, FMR and SPM. Instruments include the the Physical Property Measurement System (PPMS®), SQUID-based Magnetic Property Measurement System (MPMS®3), VersaLab, and PPMS DynaCool. In addition, Quantum Design manufactures helium liquifiers (ATL80, ATL160) recovery systems, and recently introduced an innovative 7 tesla magneto-optical cryostat (OptiCool™). They also distribute direct write and nano-lithography systems, NanoMOKE, FMR spectrometers, and single crystal furnaces.

Contact: Melissa Figueroa
Email: Melissa@qdusa.com
Website: www.qdusa.com

Western Digital.

Booth 13

Western Digital is the leader in high capacity hard disk drives for data centers and the inventor of helium sealed HDD technology with more than 27 million units shipped. Western Digital creates environments for data to thrive. The company is driving the innovation needed to help customers capture, preserve, access and transform an ever-increasing diversity of data. Everywhere data lives, from advanced data centers to mobile sensors to personal devices, our industry-leading solutions deliver the possibilities of data. Western Digital® data-centric solutions are marketed under the G-Technology™, HGST, SanDisk®, Tegile™, Upthere™, and WD® brands.

Contact: Lenny Sharp
Email: lenny.sharp@wdc.com
Website: www.wdc.com

CONFERENCE SUPPORTERS

Best Student Presentation Awards

evicomagnetics

The evico magnetics GmbH was founded in 2006 as a spin-off of the Leibniz Institut for Solid State and Materials Research (IFW) Dresden. The main products are: (i) Advanced magneto-optical wide-field Kerr microscope systems for the visualization of magnetic domains and magnetization processes in all kinds of magnetic materials. The Kerr microscopes also serve as magneto-optical magnetometers for the sensitive and local measurement of hysteresis loops by MOKE magnetometry. (ii) High Pressure Milling Vials with a gas temperature monitoring system for the synthesis of magnetic powders and hydrogen storage materials.

Contact: Rudolf Schaefer
Email: r.schaefer@evico-magnetics.de
Website: www.evico-magnetics.de

Best Poster Awards

APS physics GMAG MAGNETISM

The American Physical Society (APS) Topical Group on Magnetism and its Applications, or GMAG, represents one of the fastest-growing scientific sectors of the APS. Membership in GMAG—an annual investment of only $10 for APS members—not only helps you keep up with the fast-paced field of Magnetism but also provides the following features: A convenient way to connect with other members of the magnetism community; the GMAG Newsletter, distributed biannually; and the opportunity to shape the GMAG-sponsored sessions and symposia at the March Meeting, 80 sessions in all for 2016. The Magnetism sorting category received 921 abstracts, which is ~10% of all the abstracts submitted.

Contact: Chris Leighton
Email: leighton@umn.edu
Website: www.aps.org/units/gmag

General Conference Support

University at Buffalo
School of Engineering and Applied Sciences

The School of Engineering and Applied Sciences at the University at Buffalo tackles fundamental research and pioneers new technologies that address tough challenges faced by society. Ranked among the top engineering schools in the nation by *U.S. News & World Report*, we provide an inclusive environment that supports big thinking, creative freedom, and vast possibilities for impact for our faculty, students and alumni.

Website: engineering.buffalo.edu

U.S. DEPARTMENT OF ENERGY | Office of Science

Basic Energy Sciences (BES) supports fundamental research to understand, predict, and ultimately control matter and energy at the electronic, atomic, and molecular levels in order to provide the foundations for new energy technologies and to support DOE missions in energy, environment, and national security. The BES program also plans, constructs, and operates major scientific user facilities to serve researchers from universities, national laboratories, and private institutions. The BES program funds work at more than 160 research institutions through the following three Divisions:

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The research disciplines that the BES program supports—condensed matter and materials physics, chemistry, geosciences, and aspects of physical biosciences—are those that discover new materials and design new chemical processes. These disciplines touch virtually every aspect of energy resources, production, conversion, transmission, storage, efficiency, and waste mitigation. BES research provides a knowledge base to help understand, predict, and ultimately control the natural world and serves as an agent of change in achieving the vision of a secure and sustainable energy future.

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IEEE MAGNETICS

www.ieeemagnetics.org/

The IEEE Magnetics Society is the leading international professional organization for magnetism and related professionals throughout the world. The IEEE Magnetics Society promotes the advancement of science, technology, applications and training in magnetism. It fosters presentation and exchange of information among its members and within the global technical community, including education and training of young engineers and scientists. It seeks to nurture positive interactions between all national and regional societies acting in the field of magnetism.

IUPAP

http://iupap.org/

The International Union of Pure and Applied Physics (IUPAP) was founded in 1922 with the mission to assist in the worldwide development of physics, foster international cooperation in physics, and help in the application of physics toward solving problems of concern to humanity. The Commission on Magnetism (C9) was established by IUPAP in 1957 to promote the exchange of information and views among the members of the international scientific community in the general field of Magnetism. The Commission facilitates the organization of the International Conference on Magnetism (ICM), organizes awards to recognize outstanding scientists, and promotes free circulation of scientists, among other activities.

CONFERENCE PROGRAM-AT-A-GLANCE

SUNDAY, JULY 15, 2018

1:30 pm - 5:00 pm

WS	Workshop: Computational Micromagnetics with JOOMMF	*Room 307/308*

1:30 pm - 3:00 pm

T1	Entrepreneurship Tutorial	*Room 104*

3:30 pm - 5:00 pm

T2	Resume Writing Tutorial	*Room 104*

MONDAY, JULY 16, 2018

8:00 am - 10:00 am

AA	Néel Medal Award, IUPAP Young Scientists Awards, & Prize Talks	*Esplanade Ballroom*

10:00 am - 11:30 am • Poster Sessions *San Francisco Ballroom*

B1	Antiferromagnetic Spintronics I
B2	Biomedical and Non-Biomedical Applications I
B3	CPP-GMR and Magnetic Tunnel Junctions I
B4	Spin Caloritronics I
B5	Low Temperature Measurements and Modelling
B6	Magnetic Device for Information Storage and Processing
B7	Magnetophotonics and Magnetoplasmonics I
B8	Magnon Waveguides and Devices I
B9	Materials for Energy Applications I
B10	Molecular Magnetism I
B11	Theory of Strongly Correlated Electron Systems I
B12	Quantum Spin Liquids I
B13	Rare Earth Free Permanent Magnets I
B14	Frustrated Magnetism, Including Dimers, Kitaev Models, and Shastry-Sutherland and Honeycomb Lattices
B15	Ordered Phases in SCES 1: Mostly Magnetism
B16	Topological SCES I: Magnetic Systems

11:30 am - 12:30 pm • Oral Sessions

C1	Electric Field Effects on Magnetic Systems	*Esplanade 157*
C2	Molecular Magnetism II	*Esplanade 158*
C3	Magnetic Recording	*Esplanade 159*
C4	Domain Wall Dynamics I	*Esplanade 160*
C5	Functional Materials	*Esplanade 152*
C6	Diagnostic Biomedical Applications of MNPs	*Room 105*
C7	Advanced Synthesis of Magnetic Thin Films and Multilayers I	*Room 104*
C8	Ultrafast Spectroscopy of Strongly Correlated Systems	*Room 306*
C9	New Developments in Strongly Correlated Electron Systems I	*Room 307/308*
C10	Quantum Spin Liquids II: Theory and Applications to Materials	*Room 313/314*

1:30 pm - 3:00 pm • Oral Sessions

D1	Spin Currents and Magnonic Condensates in Magnetic Insulators	*Esplanade 157*
D2	Magnetic Skyrmions and Spin Textures	*Esplanade 158*
D3	Magnetic Molecules and Organics for Bio-applications of Magnetism	*Esplanade 159*
D4	Spin Ices and Magnetic Nanoparticles I	*Esplanade 160*
D5	Rare Earth Free Permanent Magnets II	*Esplanade 152*
D6	Magnetic Semiconductors I	*Room 105*
D7	Tunnel Junctions and Spin-Torque Nano-Oscillators	*Room 104*
D8	Unconventional Superconductivity of Sr_2RuO_4	*Room 306*
D9	Electronic Structure of Heavy Fermion Systems; Properties of URu_2Si_2	*Room 307/308*
D10	Anisotropic Spin-1/2 Chains	*Room 313/314*

3:30 pm - 5:00 pm • Oral Sessions

E1	Spin-charge Conversion and Spin-orbit Torque I	*Esplanade 157*
E2	Heterostructrues and Spin-based Devices	*Esplanade 158*
E3	Imaging Magnetic Textures I	*Esplanade 159*
E4	Magnon Waveguides and Devices II	*Esplanade 160*
E5	Magnetocaloric Materials I	*Esplanade 152*
E6	Therapeutic Biomedical Applications of MNPs	*Room 105*
E7	Magnetophotonics and Magnetoplasmonics II	*Room 104*
E8	Theory of Strongly Correlated Electron Systems II	*Room 306*
E9	Quantum Critical Phenomena	*Room 307/308*
E10	B-spinels, Kagome and Triangular Related Lattices	*Room 313/314*

5:00 pm - 6:30 pm • Poster Sessions *San Francisco Ballroom*

F1	Antiferromagnetic Spintronics II
F2	Biomedical and Non-Biomedical Applications II
F3	Heavy Fermions I: Heavy Fermions and Other Novel Phases
F4	Magnetic Imaging and Associated Techniques
F5	Magnetic Semiconductors II
F6	Magnetic Tunnel Junctions I
F7	Magnetocaloric and Frustrated Systems
F8	Magnetocaloric Materials II
F9	Quasi 1D Magnetism
F10	Soft Magnetic Materials and Magnetic Shielding I
F11	Spin Ices and Magnetic Nanoparticles II
F12	Spin Structures and Transport Properties I
F13	Spin-charge Conversion and Spin-orbit Torque II
F14	Superconducting SCES I: Topological Superconductors
F15	Topological SCES II: Theory

TUESDAY, JULY 17, 2018

8:30 am - 10:00 am • Oral Sessions

G1	Magnon Transduction	*Esplanade 157*
G2	Multiferroic Magneto-optics	*Esplanade 158*
G3	Soft Magnetic Materials and Magnetic Shielding II	*Esplanade 159*
G4	Advances with Nanoparticles I	*Esplanade 160*
G5	Magnetocaloric Materials III	*Esplanade 152*
G6	Antiferromagnetic Spintronics: Theory	*Room 105*
G7	Electric Field Control of Magnetic Systems	*Room 104*
G8	Quantum Spin Liquids III	*Room 306*
G9	Superconductivity in Ferromagnetic Heavy Fermion Systems	*Room 307/308*
G10	Spin-1 Chains and Frustrated Spin-1/2 Chains	*Room 313/314*

10:00 am - 11:30 am • Poster Sessions — *San Francisco Ballroom*

H1	Advances with Nanoparticles II
H2	Anisotropy in Magnetic Thin Films
H3	Frustrated 1D Magnets, Spin-ladders and S=1 Chains
H4	Hard Magnetic Films
H5	Heavy Fermions II: Ferromagnetic and Metamagnetic Systems
H6	Magnetocaloric Materials IV
H7	Ordered Phases in SCES II: Magnetism and Other
H8	Quantum Spin Liquids IV
H9	Soft Magnetic Materials and Magnetic Shielding III
H10	Spin Magnetoresistance I
H11	Spin-charge Conversion and Spin-orbit Torque III
H12	Spin-orbit, Kondo & Heavy Fermion Magnetism
H13	Superconducting SCES II: Heavy Fermion Superconductors
H14	Superconducting SCES III: Novel Materials
H15	Theory and Simulation of Magnetic Systems I
H16	Ultrafast Magnetism and THz Spintronics I

11:30 am - 12:30 pm

I1	Plenary I: Spin-Orbit Torques: Discoveries, Advances and Possibilities	*Esplanade Ballroom*

1:30 pm - 3:00 pm • Oral Sessions

J1	Computing with Spintronic Devices	*Esplanade 157*
J2	Molecular Magnetism III	*Esplanade 158*
J3	Quantum Spin Liquids VI: Kagome and Triangular Systems	*Esplanade 159*
J4	Advances with Nanoparticles III	*Esplanade 160*
J5	Magnetocaloric Materials V	*Esplanade 152*
J6	Vortex and Skyrmion Dynamics I	*Room 105*
J7	Semiconductor and Organic Spintronics I	*Room 104*
J8	Heavy Fermions III: Novel Results from High Field Measurement	*Room 306*
J9	Superconductivity and Quantum Criticality	*Room 307/308*
J10	Quantum Spin Liquids V: Kitaev Spin Liquids	*Room 313/314*

3:30 pm - 5:00 pm • Oral Sessions

K1	Spin Pumping	*Esplanade 157*
K2	Thin Films, Surfaces and Heterostructures	*Esplanade 158*
K3	Imaging Magnetic Textures II	*Esplanade 159*
K4	Magnetoresistance and Hall Effects	*Esplanade 160*
K5	Materials for Energy Applications II	*Esplanade 152*
K6	Spin Ices and Magnetic Nanoparticles III	*Room 105*
K7	Theory and Modelling of Nanomagnets I	*Room 104*
K8	Topological Semimetals in Kondo Systems	*Room 306*
K9	Superconductivity in 115's and Other Heavy Fermion Systems	*Room 307/308*
K10	Dimers in Frustrated Magnets: Shastry-Sutherland Lattices and Beyond	*Room 313/314*

5:00 pm - 6:30 pm • Poster Sessions — *San Francisco Ballroom*

L1	Advances with Nanoparticles IV
L2	Anisotropy Engineering of Magnetic Thin Films and Multilayers I
L3	Bulk Device Measurements and Designs
L4	Chirality, Criticality and Other Features
L5	Heavy Fermions IV: Novel Materials
L6	Magnetic Semiconductors III
L7	Magnetocaloric Materials VI
L8	Magnon Spintronics and Condensates
L9	Spin-Torque Nano-Oscillators
L10	Quantum Spin Liquids VII
L11	Skyrmions I
L12	Spin Structures and Transport Properties II
L13	New Magnetic Materials I
L14	Superconducting SCES IV: Novel Materials
L15	Topological SCES III: TM Pnictides and Chalcogenides
L16	Two Dimensional Frustrated Lattices

WEDNESDAY, JULY 18, 2018

8:30 am - 10:00 am • Oral Sessions

M1	Spin Diffusion and Relaxation	*Esplanade 157*
M2	Functional Multiferroics I	*Esplanade 158*
M3	New Sensors and New Probes	*Esplanade 159*
M4	Magnetic Configuration and Application of Nanowires and Nanotubes	*Esplanade 160*
M5	Rare Earth Transition Metal Permanent Magnets I	*Esplanade 152*
M6	Domain Wall Dynamics II	*Room 105*
M7	Spin Caloritronics II	*Room 104*
M8	Mott Insulator-to-metal Transition	*Room 306*
M9	Unconventional Superconductors	*Room 307/308*
M10	Pyrochlores and Magnetic Fragmentation	*Room 313/314*

WEDNESDAY, JULY 18, 2018 *(Continued)*

10:00 am - 11:30 am • Poster Sessions *San Francisco Ballroom*

N1 Cylindrical Nanostructures: Properties and Applications

N2 Electric Field Effects and Magnetic Switching I

N3 Kondo Insulators, Kondo Semimetals, Doped Graphene

N4 Magnon Bandstructure Engineering

N5 New Magnetic Materials II

N6 Quantum and Low-Dimensional Magnetism I

N7 Quantum Critical SCES I: Oxides, Thin Films, Mott Transition

N8 Rare Earth Transition Metal Permanent Magnets II

N9 Soft Magnetic Materials and Magnetic Shielding IV

N10 Spin Magnetoresistance II

N11 Superconducting SCES V: Heavy Fermion Superconductors II

N12 Theory and Modelling of Nanostructures II

N13 Theory and Simulation of Magnetic Systems II

N14 Thin Film and Hybrid Nanostructures I

N15 Three Dimensional Frustrated Lattices

N16 Topological SCES IV: TM Pnictides, Chalcogenides and Related

N17 Ultrafast Magnetism and THz Spintronics II

11:30 am - 12:30 pm

O1 Plenary II: Antiferromagnetic Spintronics *Esplanade Ballroom*

THURSDAY, JULY 19, 2018

8:30 am - 10:00 am • Oral Sessions

P1 Skyrmions II: Thin Films *Esplanade 157*

P2 Functional Multiferroics II *Esplanade 158*

P3 Soft Magnetic Materials and Magnetic Shielding V *Esplanade 159*

P4 Spin-charge Conversion and Spin-orbit Torque IV *Esplanade 160*

P5 Rare Earth Transition Metal Permanent Magnets III *Esplanade 152*

P6 Exchange Bias and Exchange Springs I *Room 105*

P7 Surface and Interface Effects I *Room 104*

P8 Frustration and Quantum Phase Transitions in Heavy Fermions and Beyond *Room 306*

P9 Topological Insulators in Strongly Correlated Matter *Room 307/308*

P10 Frustrated Magnetism *Room 313/314*

10:00 am - 11:30 am • Poster Sessions *San Francisco Ballroom*

Q1 Domain Wall Dynamics III

Q2 Ferromagnetic Resonance and Magnon Hybridization

Q3 Itinerant Magnetism I

Q4 Magnetoelastic and Magnetomechanical I

Q5 Multiferroics I

Q6 New Developments in SCES: Materials

Q7 New Magnetic Materials III

Q8 Novel Applications of Magnetic Thin Films and Multilayers I

Q9 Permanent Magnets in the $ThMn_{12}$ Structure

Q10 Quantum Critical SCES II: Other Systems

Q11 Soft Magnetic Materials and Magnetic Shielding VI

Q12 Spin Structures and Transport Properties III

Q13 Spin-charge Conversion and Spin-orbit Torque V

Q14 Surface and Interface Effects II

Q15 Theory and Modelling of Nanostructures III

Q16 Topological SCES V: Topological Kondo Systems

11:30 am - 12:30 pm

R1 Plenary III: Topological Weyl Magnets: From Multipole to Room Temperature Functions *Esplanade Ballroom*

1:30 pm - 3:00 pm • Oral Sessions

S1 New Routes and Materials Toward Quantum Criticality *Esplanade 157*

S2 Multiferroic and Functional Materials I *Esplanade 158*

S3 New Magnetic Materials IV *Esplanade 159*

S4 Anisotropy Engineering of Magnetic Thin Films and Multilayers II *Esplanade 160*

S5 Magnetoelastic and Magnetomechanical II *Esplanade 152*

S6 Domain Wall Dynamics IV *Room 105*

S7 Ultrafast Magnetism and THz Spintronics III *Room 104*

S8 Non-centro-symmetric Superconductors *Room 306*

S9 Topological States in Transition Metal and Organic Systems *Room 307/308*

S10 Theory and Simulation of Magnetic Systems III *Room 313/314*

3:30 pm - 5:00 pm • Oral Sessions

T1 Magnon Waveguides and Devices III *Esplanade 157*

T2 Anomalous Hall Effect and Itinerant Magnets *Esplanade 158*

T3 New Instruments and New Techniques *Esplanade 159*

T4 Topological Insulators and Spin-magnetoresistance *Esplanade 160*

T5 New Magnetic Materials V *Esplanade 152*

T6 Novel Applications of Magnetic Thin Films and Multilayers II *Room 105*

T7 Surface and Interface Effects III *Room 104*

T8 Iron Superconductors: Nematicity and Superconductivity *Room 306*

T9 Heavy Fermions V: Experiment and Theory *Room 307/308*

T10 Magnetism of 4d/5d and Spin-Orbital Systems *Room 313/314*

5:00 pm - 6:30 pm • Poster Sessions *San Francisco Ballroom*

U1 Domain Wall Dynamics V

U2 Electric Field Effects and Magnetic Switching II

U3 Exchange Bias and Exchange Springs II

U4 Surface and Interface Effects IV

U5 Magnetic Tunnel Junctions II

U6 Magnetoelastic and Magnetomechanical III

U7 Multiferroic and Functional Materials II

THURSDAY, JULY 19, 2018 *(Continued)*

5:00 pm - 6:30 pm • Poster Sessions *San Francisco Ballroom*

U8 Multiferroics II

U9 Novel Applications of Magnetic Thin Films and Multilayers III

U10 New Magnetic Measurement Methods

U11 Multipolar SCES 1: 1-2-20 Materials

U12 Quantum Critical SCES III: Heavy fermion and TM compounds

U13 Superconducting SCES VI: FeSe and Other Iron-based Superconductors

U14 Heavy Fermions VI: Theory and Experiment

U15 Thin Films, Nano- & Heterostructures

U16 Vortex and Skyrmion Dynamics II

FRIDAY, JULY 20, 2018

8:30 am - 10:00 am • Oral Sessions

V1	CPP-GMR and Magnetic Tunnel Junctions II	*Esplanade 157*
V2	Novel Multiferroics	*Esplanade 158*
V3	MRAM	*Esplanade 159*
V4	Thin Film and Hybrid Nanostructures II	*Esplanade 160*
V5	New Magnetic Materials VI	*Esplanade 152*
V6	Magnetic Semiconductors IV	*Room 105*
V7	Ultrafast Magnetism and THz Spintronics IV	*Room 104*
V8	Non-equilibrium Phenomena in Strongly Correlated Systems	*Room 306*
V9	Stripes, Magnetism, and High Temperature Superconductivity	*Room 307/308*
V10	Quantum and Low-Dimensional Magnetism II	*Room 313/314*

10:00 am - 11:30 am • Poster Sessions *San Francisco Ballroom*

W1 3D Printing and Applications of Permanent Magnets

W2 Advanced Synthesis of Magnetic Thin Films and Multilayers II

W3 Exchange Bias and Exchange Springs III

W4 Magnetic Structures and Magnetic Phase Diagrams

W5 Multiferroics III

W6 Multipolar SCES 2: Other Materials, Mostly Heavy Fermion

W7 Non-equilibrium Strongly Correlated Electron Systems

W8 Semiconductor and Organic Spintronics II

W9 Skyrmions III

W10 Soft Magnetic Materials and Magnetic Shielding VII

W11 Spin Structures and Transport Properties IV

W12 Spin Transport, Relaxation and Diffusion

W13 Superconducting SCES VII: Cuprates

W14 Superconducting SCES VIII: 122 Iron-based Superconductors

W15 Surface and Interface Effects V

11:30 am - 12:30 pm

X1	Plenary IV: Hidden Magnetic Order in Multiferroics and Superconductors	*Esplanade Ballroom*

1:30 pm - 3:00 pm • Oral Sessions

Y1	Emerging Phenomena in Van der Waals Magnets	*Esplanade 157*
Y2	Theory and Simulation of Magnetic Systems IV	*Esplanade 158*
Y4	Thin Film and Hybrid Nanostructures III	*Esplanade 160*
Y5	First Principle Simulation of Hard Magnetic Properties	*Esplanade 152*
Y6	Antiferromagnetic Spintronics: Experiment	*Room 105*
Y7	Voltage Controlled Magnetic Dynamics	*Room 104*
Y8	New Developments in Strongly Correlated Electron Systems II	*Room 306*
Y9	Heavy Fermions VII: Multipolar Materials	*Room 307/308*
Y10	Magnetism and Topological Phases	*Room 313/314*

3:30 pm - 5:00 pm • Oral Sessions

Z1	Skyrmions IV: Bulk Materials	*Esplanade 157*
Z2	Novel Magnetic Structures and Materials	*Esplanade 158*
Z4	Spin-charge Conversion and Spin-orbit Torque VI	*Esplanade 160*
Z5	New Magnetic Materials VII	*Esplanade 152*
Z6	Exchange Bias and Exchange Springs IV	*Room 105*
Z7	Surface and Interface Effects VI	*Room 104*
Z8	Strange Metal, Underdoped Cuprates, Superconducting Interfaces	*Room 306*
Z9	Heavy Fermions VIII: Novel Experiments	*Room 307/308*
Z10	Itinerant Magnetism II	*Room 313/314*

5:00 pm - 5:30 pm

ZZ	Closing	*Esplanade 152*

MONDAY
MORNING
8:00

ESPLANADE BALLROOM

Session AA

2018 IUPAP MAGNETISM AWARD AND NÉEL MEDAL AWARD CEREMONY & PRIZE TALKS

Burkard Hillebrands, Co-Chair
TU Kaiserslautern, Kaiserslautern, Germany
Kai Liu, Co-Chair
University of California, Davis, Davis, CA, United States
Allan MacDonald, Co-Chair
University of Texas at Austin, Austin, TX, United States

8:00

Welcome

Presentation of 2018 IUPAP Magnetism Award and Néel Medal

Presentation of 2016, 2017, and 2018 IUPAP Young Scientist Prizes in the field of Magnetism

AA-01. **The Marriage of Ferromagnetism and Superconductivity: A New Twist.** ***(Invited)*** *S.D. Bader*[1] *1. Argonne National Laboratory, Bridgman, MI, United States*

AA-02. **Electric Field Control of Magnetism.** ***(Invited)*** *R. Ramesh*[1] *1. Physics / MSE, UC Berkeley, Berkeley, CA, United States*

AA-03. **Topology in Spintronics: Majorana, etc.** ***(Invited)*** *K. Wang*[1] *1. Departments of Electrical and Computer Engineering, Materials Science and Engineering, Physics and Astronomy, UCLA, Los Angeles, CA, United States*

MONDAY
MORNING
10:00

SAN FRANCISCO BALLROOM

Session B1

ANTIFERROMAGNETIC SPINTRONICS I (Poster Session)

Vincent Baltz, Chair
SPINTEC, Grenoble, France

B1-01. **Withdrawn**