

# SPIN ORBIT COUPLING AND SPIN MECHANICS

29TH REIMEI AND ERATO-SQR WORKSHOP  
October 23<sup>rd</sup> - 24<sup>th</sup> 2015  
JGU-SPICE, Mainz, Germany

ORGANIZERS:  
Jun'ichi Ieda  
Jairo Sinova

SP/CE



## CONFIRMED SPEAKERS AND PARTICIPANTS

### Theory:

Helen Gomonay  
Jun'ichi Ieda  
Sadamichi Maekawa  
Mamoru Matsuo  
Michiyasu Mori

Jairo Sinova  
Yuta Yamane  
Peng Yan  
Tim Ziman

### Experiment:

Burkard Hillebrands  
Gerhard Jakob  
Mathias Kläui  
Kyuioon Lee

Eiji Saitoh  
Yuki Shiomi  
Hiroshi Yasuoka

The Spin Phenomena Interdisciplinary Center aims to bring together scientists from diverse disciplines and of varying seniority in the broad area of spin related research. Its goal is to break down scientific barriers and foster emergent areas of research that combine the strengths of different fields.

[WWW.SPICE.UNI-MAINZ.DE](http://WWW.SPICE.UNI-MAINZ.DE)





## The 29<sup>th</sup> REIMEI and ERATO-SQR Workshop on “Spin Orbit Coupling and Spin Mechanics”

23<sup>rd</sup> - 24<sup>th</sup> October 2015



**Location:** University of Mainz, Staudinger Weg 7, Germany

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# Program

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## Friday 23 October

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12:50-13:00 *Opening Address, SPICE Director **Jairo Sinova***

### SESSION 1: Spin Seebeck Effect and Magnetic Insulator (Chair: Jairo Sinova)

13:00-13:30 ***Sadamichi Maekawa**, JAEA – Efficiency and Enhancement of Spin Seebeck Effect*

13:30-14:00 ***Burkard Hillebrands**, TU Kaiserslautern – Spin Transport Using Magnon Gases*

14:00-14:30 ***Mathias Kläui**, University of Mainz – Spin Caloritronics - Spin Excitations in Ferrimagnets*

14:30-15:00 ***Gerhard Jakob**, University of Mainz – Thermal Conductivities in YIG*

15:00-15:30 *Coffee Break*

### SESSION 2: Spin Hall Effect and Spin-Orbit Torque (Chair: Jun'ichi Ieda)

15:30-16:00 ***Michiyasu Mori**, JAEA – Spin Hall Effect in Cu Alloys and Phonon Hall Effect: Skew Scattering of Electrons and Phonons*

16:00-16:30 ***Timothy Ziman**, ILL Grenoble – Spin Hall Effect and Skew Scattering in Cooperatively Ordered Magnetic Systems*

16:30-17:00 ***Jairo Sinova**, University of Mainz – Spin-Orbit Torques*

19:00-21:00 *Dinner at the restaurant Eisgrub Bräu, Weißliliegasse 1A, 55116 Mainz*

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## Saturday 24 October

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### SESSION 3: Spin Current Generation (Chair: Burkard Hillebrands)

10:30-11:00 ***Eiji Saitoh**, Tohoku University – Spin Current Generation*

11:00-11:30 ***Mamoru Matsuo**, JAEA – Mechanical Generation of Spin Current*

11:30-12:00 ***Yuki Shiomi**, Tohoku University – Spin Pumping Experiments in Topological Insulators and Skyrmion Crystals*

12:00-13:30 *Lunch*

### SESSION 4: Magnetic Property (Chair: Eiji Saitoh)

**13:30-14:00** *Hiroshi Yasuoka, MPI Dresden – NMR on Chiral Magnets FeGe and MnSi, towards NMR spintronics*

**14:00-14:30** *Jun'ichi Ieda, JAEA – Interface Magnetic Anisotropy Induced by Rashba Effect*

**14:30-15:00** *Olena Gomonay, University of Mainz – Spin-Current Induced Dynamics of Antiferromagnets*

**15:00-15:30** *Coffee Break*

**SESSION 5: Young Scientists (Chair: Mathias Kläui)**

**15:30-15:45** *Yuta Yamane, University of Mainz – Spin Transports in Dynamical Antiferromagnetic Textures*

**15:45-16:00** *Peng Yan, University of Mainz – Thermodynamic Magnon Recoil for Domain wall motion*

**16:00-16:15** *Kyujee Lee, University of Mainz – Spin-Orbit Torques*

**16:15-16:30** *Introduction of the Graduate School Excellence, MAINZ Director **Mathias Kläui***

**16:30-16:40** *Closing Remark, the Chair of REIMEI Research **Sadamichi Maekawa***

**19:00-21:00** *Dinner at the restaurant Weinhaus Zum Beichtstuhl, Kapuzinerstrasse 30, 55116 Mainz*