

Newsletter 10th March, 2015

Recent Advances in Spintronics,

Safed May 10-14, 2015

A Joint ISF & Safed Scientific Workshop

Main topics: spin transfer, spintronics with oxides, emerging spintronics phenomena, spin-orbit effects, molecular and organic spintronics, spintronic devices, and other related topics.

For details see: Spintronics2015.ph.biu.ac.il

Please note: For hotel reservation (Ruth Rimonim Safed) at discount rates through the workshop, please follow the instructions at the website **before March 26, 2015**.

Organizing committee:

Lior Klein (BIU)

Yoram Dagan (TAU)

Amos Sharoni (BIU)

Alexander Gerber (TAU)

Contact: [Sima Sharabi <simasharabi@gmail.com>](mailto:simasharabi@gmail.com)

Invited Speakers:

Amnon Aharony (BGU&TAU)

Spin Filtering: how to write and read quantum information on mobile qubits

Charles H. Ahn (Yale)*

TBA

Eugenio Coronado (University of Valencia)

Magnetic Molecules and Hybrid Materials for Molecular Spintronics

Russell Cowburn (Cambridge)

Novel applications of perpendicular magnetic anisotropy: 3-dimensional MRAM and cancer therapy

Yoram Dagan (TAU)

TBA

Hanan Dery (University of Rochester)

Spin and valley transport in two dimensional crystals- graphene and transition metal dichalcogenides

Eitan Ehrenfreund (Technion)

TBA

Ora Entin-Wohlman (BGU&TAU)

Spin-polarized electric currents in quantum transport through tubular two-dimensional electron gases

Chang-Beom Eom ()

Magnetoelectric coupling in Multiferroic BiFeO₃

Yuval Gefen (WIS)

Dynamics of a collective spin and geometric Langevin noise

Alexandre Gerber (TAU)

Probing Co-Pd interfaces by the extraordinary Hall effect

Julie Grollier (Thales)

Towards bio-inspired computing with spin-torque nanodevices

Axel Hoffmann (ANL)

Blowing Magnetic Skyrmion Bubbles

Grzegorz Jung (BGU)

Noise signatures of metastable resistivity in ferromagnetic insulating Ca-doped lanthanum manganites

Andrew D. Kent (NYU)

TBA

Amit Keren (Technion)

Quantum deflagration in the Fe₈ molecular magnet

Lior Klein (BIU)

Current-induced magnetization reversal in uniformly magnetized SrRuO₃

Amit Kohn (BGU)

The Role of Crystallographic Structure and Chemical Ordering on the Operation of the Magnetic Tunnel Junction

Gertjan Koster (University of Twente)

TBA

Jeremy Levy (University of Pittsburgh)

Oxide Nanoelectronics on Demand

Yishai Manassan (BGU)

STM detection of single electron and nuclear spins

Gil Markovich (TAU)

Spin polarized tunneling through magnetic nanoparticles - a tool for studying their magnetization dynamics

Jagadeesh S. Moodera (MIT)

A step towards molecular spintronics - engineering the molecule/ferromagnet interface

Ron Naaman (WIS)

Spintronics without magnet-The Chiral Induced Spin Selectivity (CISS) effect

Dafiné Ravelosona (University of Paris Sud)

Controlling domain wall motion on the nanoscale in Ta-CoFeB-MgO devices with perpendicular anisotropy

Eiji Saitoh (Tohoku University)

Spin Pumping to Spin Seebeck Effects

Amos Sharoni (BIU)

TBA

Laurent Vila (INAC)

Looking for efficient spin-charge current conversion using Spin-Orbit coupling

Markus Wohlgenannt (University of Iowa)

Room temperature transduction between magnetic and optical information utilizing ferromagnetic fringe-fields and radical dopant

Newsletter Items: