

Workshop on Opportunities for Magnetism in MEMS/NEMS
Argonne National Laboratory - April 16-17, 2010
Sponsored by NSF, NIST and Argonne National Laboratory

Friday, April 16

13:00 Welcome and Introduction

Chair: John Moreland

13:10 Pritiraj Mohanty
Boston University
"Study of Spin Dynamics using Nanomechanics"

13:50 T. Mitch Wallis
NIST, Boulder
"Measurement of the Einstein-de Haas Effect with a Microcantilever"

14:30 Albrecht Jander
Oregon State University
"Application of Torques to Nanostructures using Ferromagnetic Resonance"

15:10 Coffee Break

Chair: Dennis Greywall

15:30 Rassul Karabalin
Caltech
"Next-Generation NEMS Functionality Enable by Advances in Novel Materials"

16:10 Nathan Guisinger
CNM - Argonne National Laboratory
"Epitaxial Graphene: synthesis, characterization and modification"

16:50 Discussion

17:30 POSTER session

19:00 DINNER at Guest House

Saturday, April 17

07:30 Breakfast at Guest House

Chair: Axel Hoffmann

08:30 Eugene Chudnovsky
CUNY Graduate Center & Lehman College
"Magneto-Mechanical Oscillations of High-Spin Molecules"

09:10 P. Chris Hammel
The Ohio State University
"Generation of Localized Ferromagnetic Resonance Modes for Scanned Probe Imaging"

09:50 Andrew Geraci
NIST, Boulder
"Magnetic micro-resonators for quantum state manipulation in cold atoms"

10:30 Coffee Break

Chair: Daniel López

10:50 Yaroslav Tserkovnyak
UCLA
"Magnetocaloritronic generators and motors"

11:30 Mark Freeman
University of Alberta, Canada
"TBA"

12:10 Valentyn Novosad
MSD, Argonne National Laboratory
"Magneto-mechanical actuation for targeted destruction of cancer cells"

12:50 Discussion and closing

13:10 LUNCH at Guest House