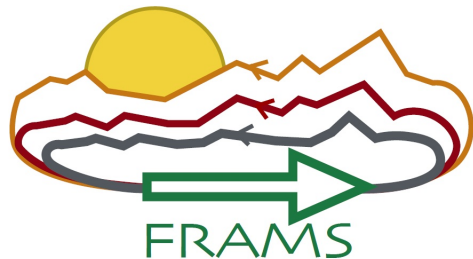


4th Front Range Advanced Magnetism Symposium

August 25th, 2018

University of Colorado – Colorado Springs



Schedule

8:15 – 9:10	Registration, Breakfast, Coffee, Chat	Dwire atrium
	All posters (for both poster sessions) may be hung up at this time.	
9:10 – 9:15	Welcoming Remarks	Dwire 121
9:15 – 10:45	Oral Session I, Chair: Karen Livesey	Dwire 121
9:15 – 9:33	Jinke Tang (UW) Interface enhanced magnetic anisotropy in Pt/EuO films	
9:33 – 9:51	Xin Fan (DU) Transverse spin-orbit effects in ferromagnetic metals	
9:51 – 10:09	William Rice (UW) Magneto-transport in type-enriched single-wall carbon nanotube networks	
10:09 – 10:27	Ezio Iacocca (CU Boulder) Spin-current-mediated rapid magnon localisation and coalescence after ultrafast optical pumping of ferrimagnetic alloys	
10:27 – 10:45	Kristen Buchanan (CSU) Time-resolved BLS measurements of spin wave propagation	
10:45 – 12:00	Poster Session I & Coffee	Dwire atrium
	All odd-numbered posters will be presented and judged. 2 or 3 awards of \$200 will be made, sponsored by Princeton Instruments.	
12:00 – 1:15	Lunch in University Center	UC 303
1:15 – 2:45	Oral Session II, Chair: Zbigniew Celinski	Dwire 121
1:15 – 1:33	Ron Goldfarb (NIST) Electromagnetic units, the Giorgi system, and the revised international system of units	
1:33 – 1:51	TeYu Chien (UW) EuO _{1-x} thin films studied by scanning tunneling microscopy and spectroscopy	

- 1:51 – 2:09 **Muhammad Tahir** (CSU)
Emergent flat band lattices in periodic magnetic fields
- 2:09 – 2:27 **Monika Arora** (NIST & CU Boulder)
Optimization of the magnetic properties of Co/Ni multilayer structures for use in STT-RAM
- 2:27 – 2:45 **Joseph Murphy** (UW)
Phase sensitive detection of the optically-induced spin-Seebeck effect in Pt/YIG heterostructures

2:45 – 4:00 Poster Session II & Coffee & Cookies Dwire atrium

All even-numbered posters will be presented and judged.
2 or 3 awards of \$200 will be made, sponsored by Princeton Instruments.

4:00 – 5:10 Oral Session III, Chair: Robert Camley Dwire 121

- 4:00 – 4:15 **Barry Zink** (DU)
Spin transport in disordered systems
- 4:15 – 4:33 **Hua Chen** (CSU)
Manipulating anomalous Hall antiferromagnets with magnetic fields
- 4:33 – 4:51 **Rair Macedo** (U Glasgow)
Ferromagnetic ordering and reversal processes in artificial spin ice
- 4:51 – 5:09 **Mingzhong Wu** (CSU)
Nontrivial nature and penetration depth of topological surface states in SmB₆ thin films

5:10 – 5:20 Closing remarks and poster prizes Dwire 121

5:30 – 7:00 Dinner for those who registered UC 303

7:00 Drinks at Clyde's Pub on campus (pay for your own) UC basement

Posters I (10:45 – 12:00)

All odd posters.
In this session, 2 or 3 awards of \$200 will be made, sponsored by Princeton Instruments.

	Presenter	School	Poster Title
1	Logan Sutton	CSU	Magnetics of FeRh island structures
3	George Smith	Mines	Thin film hybrid nanosystems for magnetocaloric refrigeration
5	Yu-Shen Yen	CSU	E field control on Co/Mgo interface
7	Alexandra Stuart	UCCS	Comparison of analytic and numerical methods of calculating a domain wall's stray magnetic field
9	Carla Mariela Quispe Flores	CSU	Skymions in ultrathin multilayer Pt/Co/Ir stacks induced by magnetostatic interaction
11	Wafa Aljuaid	DU	Free-layer-thickness-dependence of the spin galvanic effect with spin rotation symmetry
13	Aaron Wang	UW	STM measurement on EuO
15	Jinjun Ding	CSU	Observation of topological Hall effect in a magnetic insulator/topological insulator heterostructure
17	Mike Roos	DU	Magnetic, structural, and electrical characterization of disordered materials for spin transport.
19	John Stroud & Joshua Stoll	UCCS	Comparing ferrite particle synthesis methods for use in magnetic resonance thermometry
21	Kristen Blagg	Mines	Thermoelectric effects in superconductor ferromagnetic hybrids
23	Nathaniel Sorensen	UCCS	Brillouin light scattering measurements of exchange stiffness as a function of composition in copper-permalloy alloys
25	Katie Nygren	CSU	Brillouin light scattering (BLS) measurements of surface acoustic wave driven spin waves

Posters II (2:45 – 4:00)

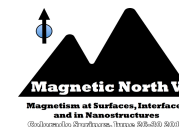
All even posters.

In this session, 2 or 3 awards of \$200 will be made, sponsored by Princeton Instruments.

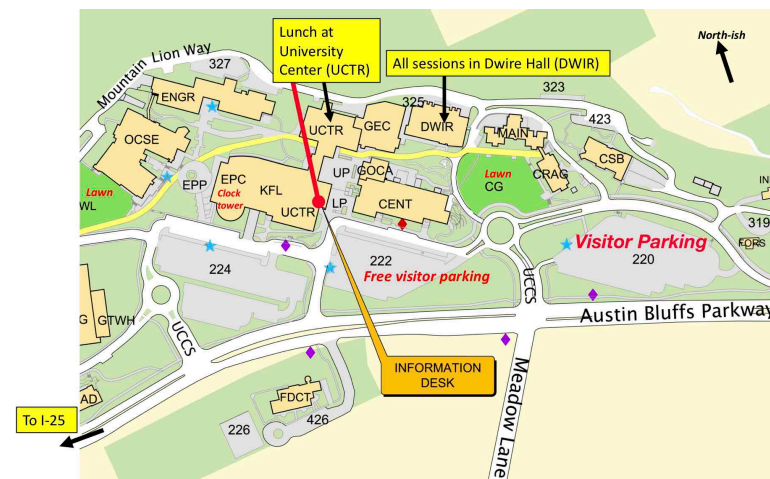
	Presenter	School	Poster Title
2	Joshua Lauzier	CSU	Magnetic irreversibility in VO ₂ /Ni bilayers
4	Bradley Lloyd & Joel Howard	Mines	Electrostatically defined quantum dots in silicon
6	Rui Yu	CSU	Magnon-mediated current drag in Pt/amorphous-YIG/Pt tri-layer
8	Patrick Sprenger	CU-B	Nonlocal dipole effects on spin density waves in planar ferromagnets
10	Danielle Harris	CSU	Re-entrant phase diagram of Er ₂ Sn ₂ O ₇ in a <111> magnetic field
12	Shane Allen	DU	Platinum spin diffusion length
14	Subash Kattel	UW	Optically generated spin current in Pt/magnetic insulator structures
16	Gavin Hester	CSU	A novel strongly spin-orbit coupled quantum dimer magnet: Yb ₂ Si ₂ O ₇
18	Angie Davidson	DU	Exploring zero spin Hall alloy
20	Danielle Morin	UCCS	Investigating the effect of static magnetic fields on RBL-2H3 cell degranulation
22	Diego Alcalá	Mines	Surface spin wave propagation in disordered YIG thin films
24	Sara Goldman	UCCS	Fabrication and characterization of high permeability magnetic multilayers for improving inductors operating at RF and low GHz frequencies

Many thanks to our sponsors:

- UCCS College of Letters, Arts and Sciences
- UCCS Office of Academic Affairs (Office of the Provost)
- Magnetic North V conference
- Administrative support from Kristen Petersen (UCCS Biofrontiers)
- Princeton Instruments for sponsoring poster prizes given directly to student presenters



Map of UCCS



We hope to see you at FRAMS next year!