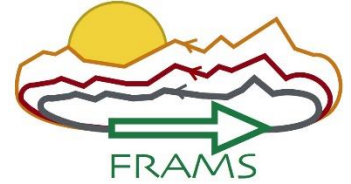




UW

**8th Front Range Advanced
Magnetics Symposium (FRAMS)**



August 20th (Sat), 2022

The Marian H. Rochelle Gateway Center, University of Wyoming



Colorado State University

NIST



University of Colorado
Boulder



UNIVERSITY
OF WYOMING



University of Colorado
Colorado Springs



UNIVERSITY of
DENVER



COLORADO SCHOOL OF MINES
EARTH • ENERGY • ENVIRONMENT

Organizers

- TeYu Chien – Chair
- Yuri Dahnovsky
- Jinke Tang
- Jifa Tian
- Wenying Wang
- Jessica Andrew - Financial

Website:

<http://physics.uwyo.edu/~teyu/FRAMS8th/>

Zoom link:

<https://uwyo.zoom.us/j/4428845729>

Sponsors/Financial Supports



Programs

Saturday, August 20, 2022

8:00 am to 9:00 am	Registration and Breakfast
9:00 am to 9:05 am	Opening Remarks by TeYu Chien
9:05 am to 10:45 am	Oral Presentations I (Chair: Dmytro Bozhko)
9:05 am to 9:30 am	Hua Chen (CSU) Magnetic charge and indicators of the anomalous Hall effect in unconventional magnetic systems
9:30 am to 9:55 am	Kristen Buchanan (CSU) Topological spin memory of skyrmions
9:55 am to 10:20 am	Ezio Iacocca (UCCS) Anisotropic MagnetoMemristance
10:20 am to 11:50 am	Poster Presentations I, Coffee Break
11:50 am to 1:20 pm	Lunch, and Lunch with Experts
1:20 pm to 1:30 pm	Sponsor Talk (Quantum Design)
1:30 pm to 3:10 pm	Oral Presentations II (Chair: Eve Mozur)
1:30 pm to 1:55 pm	Jifa Tian (UW) Exploring Magnetic Phase Transitions in Few-layer 2D Magnets
1:55 pm to 2:20 pm	Keunhong Jeong (Korean Military Academy) Reaction monitoring on organic and biological reactions using parahydrogen-based hyperpolarization technique
2:20 pm to 2:45 pm	Okten Ungor (CSU) Record Chemical-Shift Temperature Sensitivity in Cobalt(III) Based Molecular Thermometers
2:45 pm to 3:10 pm	Yuri Dahnovsky (UW) Transport in helical spin structures
3:10 pm to 3:20 pm	Group Photo
3:20 pm to 4:50 pm	Poster Presentations II, Coffee Break
4:50 pm to 5:30 pm	Poster Awards and Conclusion

Poster Session

Poster Session I: poster number 1-15

Poster Session II: poster number 16-30

Poster	Name	Poster Title
1	Roxanna Martinez (CSU)	Impact of Ligand Chlorination on Spin Relaxation in a Series of V(IV) Complexes
2	Adam Whitney (CSU)	Damping in STT-MRAM Free Layers at Elevated Temperatures
3	David King (UWyo)	Magnetic Properties and Fabrication of Polycrystalline Thin Film Copper Selenate
4	ZhuangEn Fu (UWyo)	Electrically tunable tunneling anisotropy magnetoresistance in few-layer CrPS ₄
5	Ryan Greening (DU)	Influence of nonuniform magnetization reorientation on spin-orbit torque measurements
6	Eve Mozur (Mines)	Tuning the Spin Structure in a Tetragonal Inverse Heusler
7	Jeff Carter (UWyo)	Exploration of bulk 2M-WS ₂
8	Lauren Kim (UWyo)	Determining elements of high entropy alloys using Scanning Tunneling Microscopy
9	Alison Roxburgh (UCCS)	Manipulating the magnon dispersion relation in nano-designed magnonic crystals
10	Ok Sanchez (CSU)	Engineering Temperature-Response in Co(III) Imaging Probes
11	Kaitlin McAllister (UCCS)	Experimental observation of magnetic rogue waves
12	Victoria Martinez (UCCS)	Determination of Anisotropy Factors of Nanomagnets
13	Paul Slayback (Mines)	Fabricating Fe ₃ GeTe ₂ Hall Bars to Study Skyrmions in Magnetic 2D materials
14	Mitchell Swyt (CSU)	BLS measurements of the Dzyaloshinskii-Moriya Interactions in magnetic multilayers with double heavy metal underlayers
15	Ian Moseley (CSU)	Slowing Magnetic Relaxation with Open-Shell Diluents
16	Kyle Peterson (DU)	Magnetic Dynamics in Exchange Coupled Permalloy and Cobalt
17	Renju Peroor (UCCS)	Characterization of Barium Hexaferrite for Quantum Magnonics Applications
18	Piumi Samarawickrama (UWyo)	Thickness dependent superconductivity in a topological superconductor candidate 2M-WS ₂
19	Sein Min (Seoul Women's University)	The SABRE for the polarization of Bis[2-pyridyl(alkyl)]amine
20	Jisu Kim (Seoul Women's University)	Parahydrogen – induced hyperpolarization on metal complex :Zn(II) - tris(2-pyridylmethyl)amine)
21	Kyle Rockwell (UCCS)	An atomistic-to-micromagnetic model for ultrafast magnetization dynamics
22	Juhee Baek (Seoul Women's University)	Developing catalysts for Signal amplification by reversible exchange in dimethylsulfoxide solvent system
23	Narendra Shrestha (UWyo)	Comparing Magnetoresistance Between Eu metal and Eu/Pt Bi-layer Thin Films
24	Dinesh Baral (UWyo)	Exploring Fe substituted WTe ₂ Using Scanning Tunneling Microscopy and Spectroscopy (STM/S)
25	Byron Fritch (CSU)	Development of Single Shot Magnetic Imaging with a Tabletop X-Ray Source
26	Vijaysankar Kalappattil (CSU)	Characterization of Fermi level spin texture using bilinear magnetoresistance in topological Dirac semimetal α -Sn
27	William Scougale (UWyo)	Possible Kondo Effect Observation on Multi-Phase Tungsten Disulfide Moiré Lattice
28	Ryan Dunagin (UCCS)	Low-cost Brillouin light scattering spectroscopy setup for observation of magnon Bose-Einstein condensation
29	Stephen E. Russek (NIST)	MRI Measurements of Microscopic Water Motion and Tissue Structure using Spin Manipulation
30	Luke Wernert (CSU)	Noether spin current in noncollinear kagome antiferromagnet models

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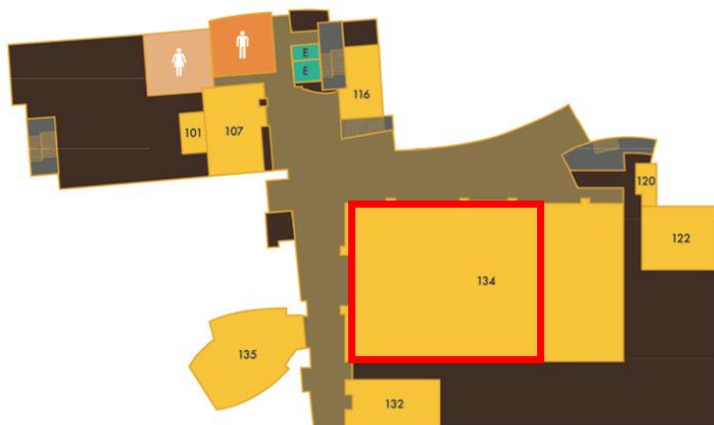
The Marian H. Rochelle Gateway Center

The 8th FRAMS will be held at the Marian H. Rochelle Gateway Center with address of: 222 South 22nd Street, Laramie, WY 82070. The parking lot is located at the north side of the Center. The parking is free in the weekend.



The symposium will be conducted in the Event Center (134) at the 1st floor of the Gateway Center.

MARIAN H. ROCHELLE GATEWAY CENTER



1ST FLOOR

- 101 - Alumni Offices
- 107 - Blalock Family Room
- 116 - Tomé Student Admissions Center
- 120 - Facility Manager
- 122 - Cowboy Call Center
- 132 - Cline President's Room
- 134 - Event Center
- 135 - McMurry Foundation UW Legacy Hall

WiFi access:

Look for "UWguest" in your WiFi settings. This is an unsecured and open network for guest access only. This provides access to the internet but not to UW resources. You will need to accept the Campus Acceptable Usage Policy to use this network.