

Friday Oct. 14, 2022 – afternoon invited sessions

Joint Plenary Session Location: DeMeritt Hall 112

Time	Speaker	Topic
1:00PM – 1:05PM	Dean Gruden	Welcome from UNH
1:05PM – 1:10PM	Prashant Sharma	Welcome from APS-NES
1:10PM – 1:15PM	Per Berglund	Welcome from Physics Department
1:15PM – 2:00PM	Abhay Deshpande	Spin at the EIC
2:00PM – 2:45PM	Peter Schiffer	Artificial Spin Ice: A Playground for Frustration
2:45PM – 3:15PM		COFFEE BREAK

Parallel Invited Sessions 1 – Condensed Matter Location: DeMeritt Hall 112

Time	Speaker	Topic
3:15PM – 4:00PM	Andrew Kent	A new spin on magnetism with applications in information processing
4:00PM – 4:45PM	Luqiao Liu	Spin Torque Control of Magnetic Multiples in Topological Antiferromagnets

Parallel Invited Sessions 1 – Nuclear Physics Location: DeMeritt Hall 240

Time	Speaker	Topic
3:15PM – 4:00PM	Douglas Higinbotham	Nuclear Physics with polarized beams and polarized targets at Jefferson Lab
4:00PM – 4:45PM	James Maxwell	Probing Nuclear Structure with Polarized Targets at Jefferson Lab

Poster and Banquet Location: Three Chimney Inn

5:30PM – 6:30PM		Poster Session
6:30PM	Jiadong Zang	Dinner

Saturday Oct. 15, 2022 – afternoon contributed sessions

Parallel Contributed Sessions 1 – Condensed Matter Location: DeMeritt Hall 251

Time	Speaker	Topic
1:00PM – 1:15PM	Junghun Han	Topological Thermal Hall Effect of Magnons in Magnetic Skyrmion Lattice
1:15PM – 1:30PM	Benjamin Zager	Chiral spin texture in the anomalous Hall antiferromagnet CoNb3S6
1:30PM – 1:45PM	Matthew Enjalran	Avoidance of magnetic frustration: charge and magnetic ordering in the triangular lattice Hubbard model
1:45PM – 2:00PM	Kuangyin Deng	Dynamically tunable magnon-magnon coupling in synthetic antiferromagnets
2:00PM – 2:15PM	Qiaochu Wang	Magnetic phase competition in the highly frustrated iridate K2IrCl6
2:15PM – 2:30PM	Xin Li	Exceptional points in magnetic systems
2:30PM		CLOSE OF CONFERENCE

Parallel Contributed Sessions 2 – Condensed Matter Location: DeMeritt Hall 253

Time	Speaker	Topic
1:00PM – 1:15PM	Tsung-Han Yang	Molecular spin-orbital fluctuations in cluster Jeff-3/2 Mott insulator
1:15PM – 1:30PM	Brendan Sheehan	A Clock Transition in Borosilicate Glass
1:30PM – 1:45PM	Ehan Williams	Comparison of power spectra in diamond at 2.5 GHz for nitrogen defects
1:45PM – 2:00PM	Dan Liu	Jammed disks of two sizes and weights in a narrow channel
2:00PM – 2:15PM	Michael DiScala	Dimensionality dependent electronic structure in exfoliated van-der-Waals antiferromagnet NiPS3
2:15PM – 2:30PM	Shawna Hollen	The many faces of 1T-TaS2: the role of dynamics, layer stacking, and defects in the electronic ground state
2:30PM		CLOSE OF CONFERENCE

Saturday Oct. 15, 2022 – morning invited sessions

Parallel Invited Sessions 2 – Condensed Matter Location: DeMeritt Hall 112

Time	Speaker	Topic
8:00AM – 8:30AM		Continental Breakfast
8:30AM – 9:15AM	Tyrel McQueen	The Convergence of Quantum Materials and Quantum Information Science
9:15AM – 10:00AM	Kemp Plumb	Bond ordering and molecular orbital fluctuations in a cluster Mott insulator
10:00AM – 10:30AM		Coffee break & Lab Tours
10:30AM – 11:15AM	Liang Fu	TBA
11:15AM – 12:00PM	Chandrasekhar Ramanathan	Spectral Diffusion of Phosphorus Donors in Silicon at High Magnetic Field
12:00PM – 1:00PM		Box Lunch

Parallel Invited Sessions 2 – Nuclear Physics Location: DeMeritt Hall 240

Time	Speaker	Topic
8:00AM – 8:30AM		Continental Breakfast
8:30AM – 9:15AM	Drew Weisenberger	Applications of Nuclear Physics
9:15AM – 10:00AM	Thorsten Maly	Instrumentation for High- and Low-Field/High-Frequency DNP/EPR Spectroscopy
10:00AM – 10:30AM		Coffee break & Lab Tours
10:30AM – 11:15AM	David Kawall	An anomaly in an anomaly? First results from the muon g-2 experiment at FNAL
11:15AM – 12:00PM	Andrew Puckett	Polarized 3He experiments at Jlab
12:00PM – 1:00PM		Box Lunch

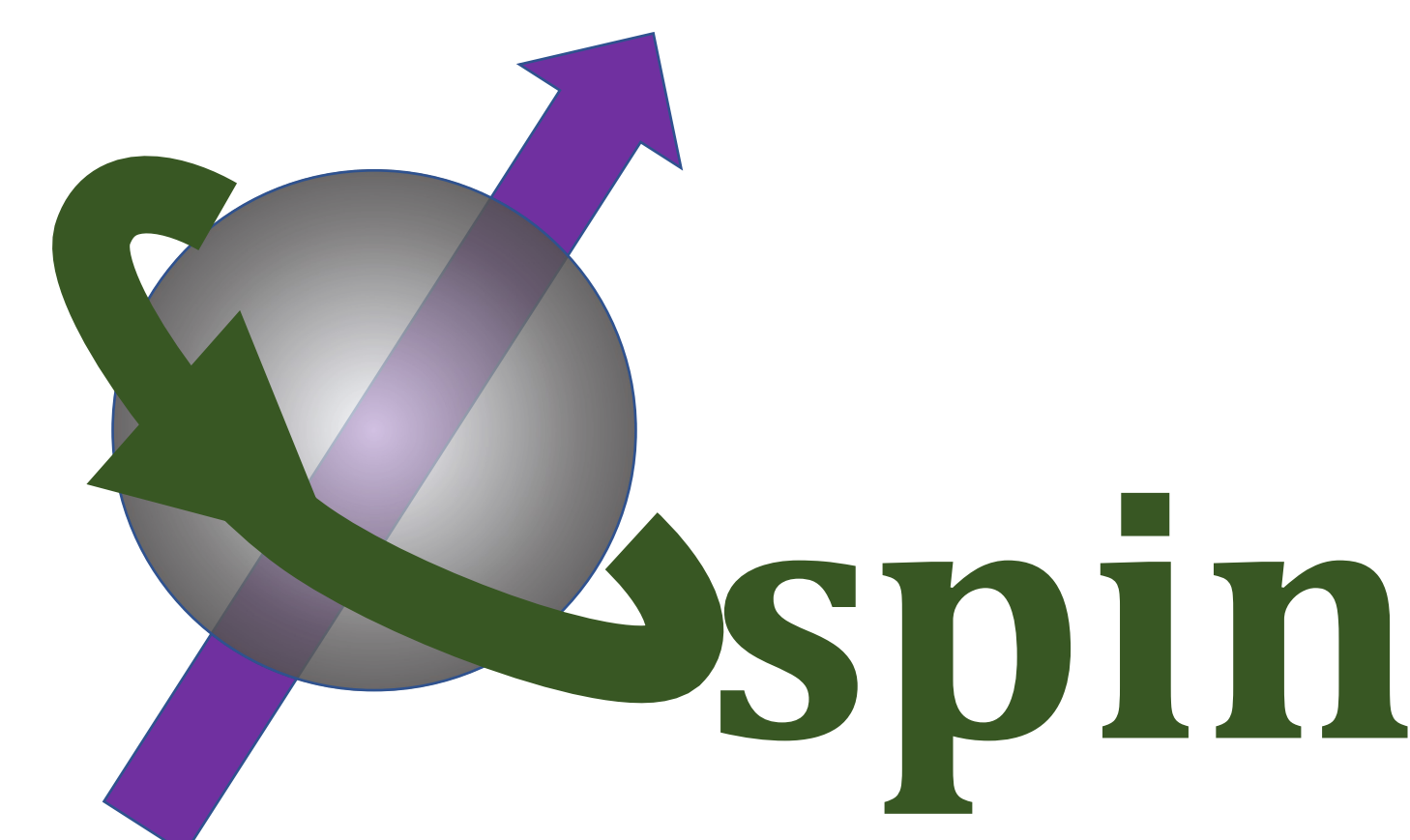
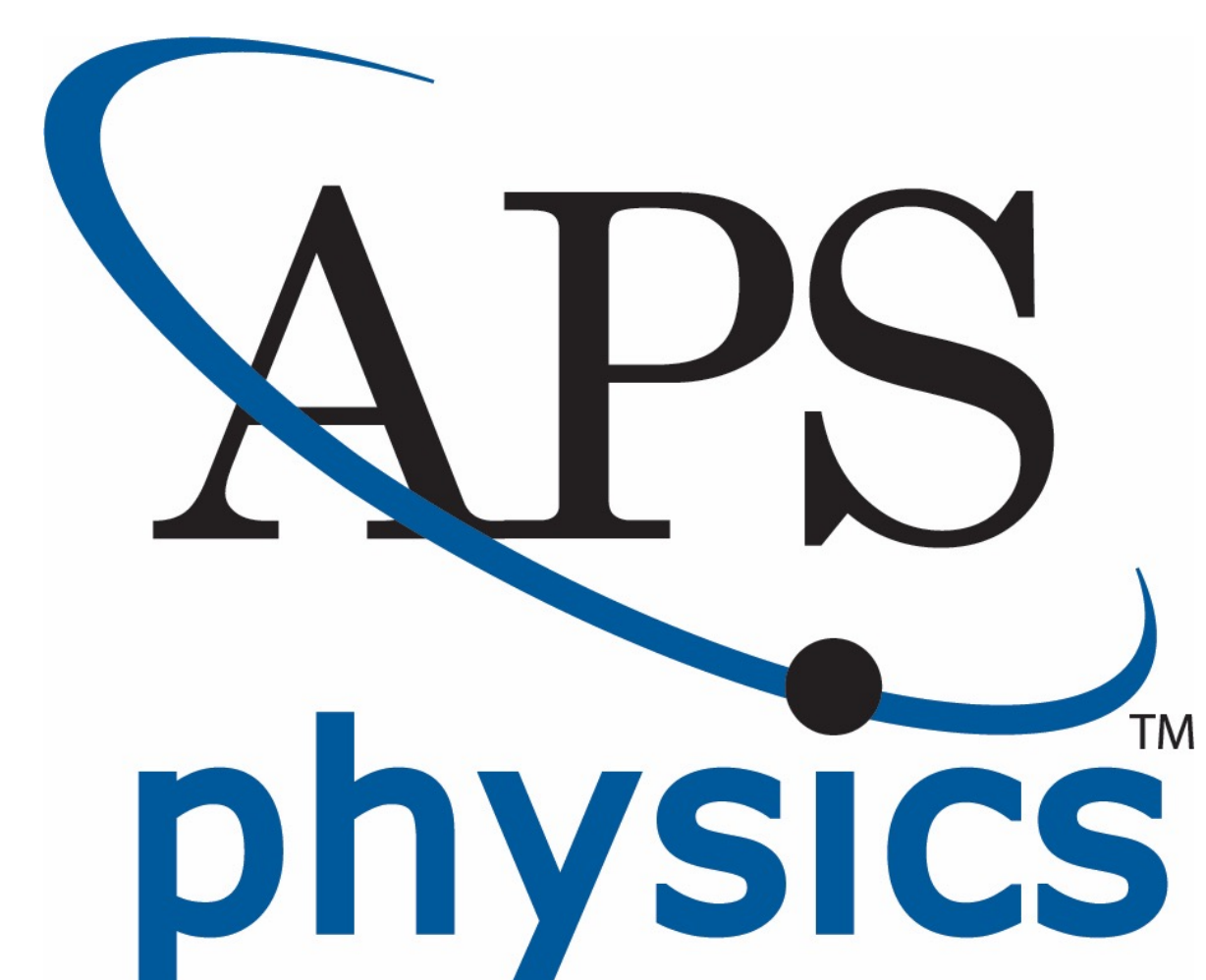
Saturday Oct. 15, 2022 – afternoon contributed sessions

Parallel Contributed Sessions 3 – Nuclear Physics Location: DeMeritt Hall 240

Time	NP Speaker	Topic
1:00PM – 1:15PM	Elizabeth Scheuremann	The Electric Polarizability of J/Psi
1:15PM – 1:30PM	David Ruth	Proton Spin Structure & Polarizabilities in the Strong QCD Regime
1:30PM – 1:45PM	Elena Long	Tensor Polarization: A New Window into Nuclear Structure
1:45PM – 2:00PM	Allison Zec	Achieving High Deuteron Tensor Polarization Using Dynamic Nuclear Polarization
2:00PM – 2:15PM	Michael McClellan	DNP @ UNH: Vector and Tensor Polarization Extraction from Line-Shape Analysis
2:15PM – 2:30PM	Hadrack Green	Correlations of Prompt Fission Radiation in Measurements with DANCE and NEUANCE
2:30PM		CLOSE OF CONFERENCE

Parallel Contributed Sessions 4 – General Physics Location: DeMeritt Hall 238

Time	Speaker	Topic
1:00PM – 1:15PM	Richard Price	Binary Black Hole Mergers: Comparison of Numerical Relativity and Particle Perturbation Methods
1:15PM – 1:30PM	David Kraft	Study of Kirkwood Gaps in a Planar Restricted Three-Body Formulation
1:30PM – 1:45PM	Hassan Elhayed	The First Law of Thermodynamics in AdS5 in the Presence of Conformal Anomalies
1:45PM – 2:00PM	Brennen Black	The large amplitude simple pendulum and Fourier series; an analysis for undergraduates
2:00PM – 2:15PM	Lucas Roosli	Electrically Controlled Spectral Properties of Polymer-Dispersed Liquid Crystals Tailored to Privacy Windows Applications
2:15PM – 2:30PM	Nina Christenson	Studying the Polarization of Protoplanetary Nebulae using Newly Developed Polarization Sensitive Imaging Sensors
2:30PM – 2:45PM	Donald Lacey	The Quantum Certainty Knowledge Theory: An Indeterminate and Determinate Theory of Quantum Interaction
2:45PM – 3:00PM	Jeffrey Boyd	A Unifying Theory for Quantum Physics



University of
New Hampshire