

# Poster Directory Cluster Retreat 2023

Poster ID	Presenter	Affiliation	Poster title
P1	P. Basteiro	JMU	Aperiodic spin chains for discrete holography on hyperbolic tilings
P2	R. N. Das	JMU	Probing factorisation with geometric quantum discord
P3	F. Goth	JMU	Hypertiling – A high-performance Python library for the generation and visualization of hyperbolic lattices
P4	S. Enzner	JMU	Unstrained Sb bilayers on InSb(111)A
P5	P. Härtl	JMU	Conical spin-spirals at a ferromagnet's surface
P6	M. Herz	TUD	Novel binary, ternary and quaternary phases in the Bi-Mn-Pt-I System
P7	B. Heß	JMU	Spin hydrodynamics in semimetals from gravity
P8	J. Heißdörfer	JMU	Electronic properties of the topological insulator candidate: $\text{Bi}_{12}\text{Rh}_3\text{Ag}_2\text{I}_5$
P9	H. Hohmann	JMU	Pair density wave instability in the kagome Hubbard model
P10	F. Keller	JMU	Doping of coupled 1D topological protected edge states on the (001) surface of the topological crystalline insulator (Pb,Sn)Se
P11	H. - H. Klauss	TUD	Degenerated superconductivity and fluctuation induced phases in the multiband system $\text{Ba}_{1-x}\text{KxFe}_2\text{As}_2$
P12	P. Konrad	JMU	Two-dimensional quantum sensors in hexagonal boron nitride
P13	V. Kornich	JMU	Current-voltage characteristics of the N-I-PT-symmetric non-Hermitian superconductor junction as a probe of non-Hermitian formalisms
P14	C. Kourris	TUD	Kondo screening and coherence on the kagome lattice
P15	M. Leisegang	JMU	Probing spin-dependent charge transport at single nanometer scale
P16	C. Li	JMU	Magnetic enhancement of second-order non-Hermitian skin effect
P17	J. S. Lim	JMU	Large anomalous Hall effect of $\text{SrIrO}_3$ (111) film with spontaneously forming superstructure
P18	H. Lohani	JMU	Electronic structure evolution of magnetic Weyl semimetal $\text{Co}_2\text{Sn}_2\text{S}_2$ by doping and temperature
P19	S. Luther	HZDR DD	Field-tuned critical fluctuations in the triangular-lattice delafossite $\text{NaYbO}_2$ probed by $^{23}\text{Na}$ NMR
P20	L. Ma	IFW DD	Tunable topological properties in 2D and 3D photonic devices
P21	M. H. Martins Costa	IFW DD	Renormalization as a quantum channel, momentum space entanglement, and the separability of fixed points
P22	R. Meyer	JMU	Entanglement and symmetries in conformal field theories and holography

P23	A. Mistonov	TUD	Ferromagnetic inverse opal as a candidate for a 3D artificial spin-ice system
P24	G. Naselli	IFW DD	Nontrivial gapless electronic states at the stacking faults of weak topological insulators
P25	G. Rein	JMU	A toy model to investigate the role of topology in quantum phase transitions
P26	A. Reingruber	JMU	Thermodynamics of the frustrated Heisenberg model on the truncated hexagonal lattice
P27	F. Richter	JMU	Non-hermiticity and parity-time symmetry at X-ray wavelengths
P28	C. Schmitt	JMU	Graphene-intercalation of the quantum spin Hall insulator indenene: towards device integration
P29	V. Schwarze	HZDR DD	Fermi surfaces of the chiral topological semimetal CoSi
P30	N. Stölkerich	TUD	Possible stress-driven spiral-to-Néel transition in the triangular antiferromagnet PdCrO <sub>2</sub>
P31	J. Sturm	JMU	Towards topological X-ray quantum control
P32	H. Sun	JMU	Magnetic topological transistor exploiting layer-selective transport
P33	S. Tamura	JMU	Emergence of polarized spin-triplet pairings by magnetic barrier in superconducting junction
P34	A.-V. Tcakaev	JMU	Intermixing-driven surface and bulk ferromagnetism in the quantum anomalous Hall candidate MnBi <sub>6</sub> Te <sub>10</sub>
P35	G. Thakur	TUD	High temperature magnetic ordering in new quadruple perovskites Sr <sub>4</sub> NaM <sub>3</sub> O <sub>12</sub> (M = Ru and Os)
P36	M. Ulybyshev	JMU	Instanton gas approach to the Hubbard model
P37	A. McRoberts	MPI-PKS	Long lived solitons and anomalous dynamics in the classical Heisenberg chain
P38	Z. Liu	JMU	Exploring the thermodynamic properties of interacting Dirac fermions with SO(3) symmetry
P39	V. Hinkov	JMU	Magnetism in the Weyl semimetal Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub>
P40	J. Erhardt	JMU	Bulk signatures of topology in a QSH insulator probed by circular dichroism in ARPES