ICMMP 2026 Abridged Program

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Registration</td><td>Honorary Degree Ceremony: Prof. Michael Berry (Zhejiang University)</td><td>S2. Integrable Models in Condensed Matter Physics and Statistical Physics</td><td rowspan="8">Social Activities</td></tr>
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<tr><td rowspan="2">Conference Banquet</td><td>Keynote 2: Prof. Murray Batchelor</td></tr>
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ICMMP 2026 Detailed Program

ICMMP 2026 Detailed Program – The 1st International Conference on Modern Mathematical Physics		
DAY 1 (31 October, Saturday)		
Morning		
9:00-9:10	**Opening Ceremony**	
S2. Integrable Models in Condensed Matter Physics and Statistical Physics **Chaired By: Prof. Balazs Pozsgay** Eötvös Loránd University, Budapest, Hungary		
9:10--10:00	*Plenary Speech* **Prof. Yupeng Wang** Chinese Academy of Sciences, Beijing, China	Exact Thermodynamics and Fractional Degeneracy of the XX Spin Chain with Arbitrary Boundary Fields
10:00-10:40	*Keynote Speech* **Prof. Tomaz Prosen** University of Ljubljana, Ljubljana, Slovenia	Integrable Interactions Round-a-Face and Exactly Solvable Quantum/Stochastic Cellular Automata
10:40-11:10	*Coffee Break*	
11:10-11:50	*Keynote Speech* **Prof. Yunfeng Jiang** Southeast University, Nanjing, China	TTbar-Deformed CFT Partition Functions: Uniqueness, Resurgence, and Harmonic Analysis
11:50-14:00	*Lunch Break*	

Afternoon		
14:00-14:20	**Ceremony for Honorary Degree on Professor Michael Berry by Zhejiang University**	
S5. Nonlinear Dynamics and Computational Physics **Chaired By: Prof. Wenli Yang** Northwest University, Xi'an, China		
14:20-15:10	*Plenary Speech* **Prof. Michael Berry** University of Bristol, Bristol, UK	Divergence and Resurgence
15:10-16:00	***Coffee Break + Poster Session A***	
16:00-16:40	*Keynote Speech* **Prof. Haiqing Lin** Zhejiang University, Hangzhou, China	Some Issues in Quantum Simulation
16:40-17:20	*Keynote Speech* **Prof. Xiwen Guan** University of Chinese Academy of Sciences, Wuhan, China	Fractional Exclusion Statistics in Quantum Holonomy

Day 2 (1 November, Sunday)		
Morning		
S1. Quantum Field Theory, String and Brane Theory, and Gravitation **Chaired By: Prof. Jianxin Lu** University of Science and Technology of China, Hefei, China		
9:00-9:50	*Plenary Speech* **Prof. Piljin Yi** Korea Institute for Advanced Study, Seoul, Korea	Conservation Laws Redux
9:50-10:30	*Keynote Speech* **Prof. Ruben Minasian** Paris-Saclay University, Paris, France	Holography and SymTFTs
10:30-11:00	*Coffee Break*	
11:00-11:40	*Keynote Speech* **Prof. Urs Schreiber** NYU Abu Dhabi, Abu Dhabi, United Arab Emirates	Electromagnetic Flux Quantization: Global Completion of Higher Gauge Theories
11:40-12:20	*Keynote Speech* **Prof. Chi-Ming Chang** Tsinghua University, Beijing, China	Large Gaps and BTZ Entropy in Discrete Modular Spectra
12:20-14:00	*Lunch Break*	

Afternoon		
S2. Integrable Models in Condensed Matter Physics and Statistical Physics **Chaired By: Prof. Xiwen Guan** University of Chinese Academy of Sciences, Wuhan, China		
14:00-14:40	*Keynote Speech* **Prof. Benjamin Doyon** King's College London, London, UK	Emergence of Unconventional Hydrodynamics from Soliton-Like Interactions: Waves in the Sea, Fields in Optic Fibres, Atoms in Traps
S3. Quantum Information and Quantum Metrology		
14:40-15:30	*Plenary Speech* **Prof. Augusto Smerzi** Shenzhen Technology University (SZTU), Shenzhen, China	Unveiling Useful Entanglement: Quantum Advantage in Sensing and Metrology
15:30-16:20	*Coffee Break + Poster Session B*	
16:20-17:00	*Keynote Speech* **Prof. Qiongyi He** Peking University, Beijing, China	Characterizing the Multipartite Entanglement Structure of Non-Gaussian Continuous-Variable States
17:00-17:40	*Keynote Speech* **Prof. Murray Batchelor** Australian National University, Canberra, Australia	Goldstone Modes and State-Dependent Entanglement in Highly Degenerate Quantum Systems

Day 3 (2 November, Monday)		
Morning		
S4. Atomic, Molecular, and Optical Physics **Chaired By: Prof. Murray Batchelor** Australian National University, Canberra, Australia		
9:00-9:50	*Plenary Speech* **Prof. Thierry Giamarchi** University of Geneva, Geneva, Switzerland	Correlations and Dimensionality in Cold Atomic Gases
9:50-10:30	*Keynote Speech* **Prof. Roberta Citro** University of Salerno, Campania, Italy	Out of Equilibrium Dynamics of Interacting One Dimensional Systems: Correlation Dynamics, Thermal Fate and Parametric Resonances
10:30-11:00	*Coffee Break*	
11:00-11:40	*Keynote Speech* **Prof. Shizhong Zhang** The University of Hong Kong, Hong Kong, China	Physics of an Ion Impurity in a Dilute Fermi Gas
11:40-12:10	**Closing Ceremony**	
12:10-14:00	*Lunch Break*	

Poster Sessions

Poster Session A, 31 October (Saturday) | 15:10 - 16:00
Poster Session B, 1 November (Sunday) | 15:30 - 16:20

- Regardless of whether your poster is assigned to Session A or Session B, please post your poster from **8:00 to 12:00 on 31 October.**
- Materials including scissors, tape and other supplies will be provided on site.
- All posters must be removed **between 16:30 and 22:00 on 1 November**. Posters left unattended after the deadline will be removed by conference staff. The conference organizers do not guarantee safe custody or return of such posters.

Poster Session A, 31 October (Saturday) | 15:10 - 16:00

No.	Name	Title
1	C. A. Fan	A New Superstring Theory—From the Origin of Maxwell's Equations to the Supersymmetric Structure of Elementary Particles
2	Tongsheng Xia	A Model for the Higgs Field
3	Chang Lei	M2-Brane Indices on Higgs Vacua and Black Holes
4	Yang Lei	Mellin Transformation and Higher Rank of Modular Transformation
5	Hua-Chen Zhang	Entropic Order Parameters and Topological Holography
6	Laura Batini	Critical Dynamics of a Scalar Field near Four Spatial Dimensions
7	Yuan-Tai Wang	Reconstructing Holographic Geometry from Real-Space Entanglement
8	Xiao-Yang Yang	Solving Nonequilibrium Dynamics via Influence Matrix Bootstrap: Floquet-PXP Model
9	De-Zhang Li	Free-Fermion Approach to the Partition Function Zeros: Special Boundary Conditions and Product Form of Solution
10	Huai-Yu Wang	The Axiomatic System Containing Quantum Mechanics and Classical Mechanics
11	Rui-Dong Zhu	A Class of Non-Invertible Symmetries on Lattice from Integrability and Parafermion
12	Jian Xian Sim	Nonlocality Can Generate ω/T Scaling without Criticality in High-Tc Strange Metals
13	Jiazhen Liu	Dynamical Phase Transitions in Nonequilibrium Networks
14	Nicolo Defenu	Irreversibility Without Dissipation
15	Egor Teplyakov	Topological Aspects of Graphene
16	Kazunari Hashimoto	Spectroscopic Fingerprints of Liouvillian Exceptional-Point Order in Nonequilibrium Current Noise
17	Yuguan Li	Exact Solution and Ground-State Energy of the Periodic Baxter–Fendley ZN Chain
18	Xiao-Han Yang	Lattice Symmetry Remnants in Spatial and Temporal Entanglement of Quantum Critical Spin Chains
19	Ziyang Liu	Fractional Exclusion Statistics in Quantum Holonomy
20	Haiying Cui	Luther-Emery Liquid in One-Dimensional Attractive Fermi Gas
21	Xinran Zhang	Breathing Mode of Quantum Droplets in Dipolar Quantum Gases: A Sum-Rule Analysis
22	Tian-Cheng Yi	Topological and Mott Phases Driven by Gain and Loss in a Correlated Chern Insulator
23	Zizhou Yuan	Sound Propagation in One-Dimensional Quantum Droplets
24	Shuang Zhang	Universal Drude Weights in One-Dimensional Repulsive Fermi Gas
25	Zhen-Xia Niu	Understanding Critical Dynamics in a Spinor Bose–Einstein Condensate via Quantum and Semiclassical Analyses

Poster Session B, 1 November (Sunday) | 15:30 - 16:20

No.	Name	Title
26	Hangshi Xu	Topological Protection in Structured Environments: From Quantum Information to Biological Systems and Cosmological Scales
27	Ken Krechmer	Schrödinger's Cats Superposition and Measured Time
28	Jia-Xuan Liu	Quantum Estimation with State Symmetry-Induced Optimal Measurements
29	Lei Chen	A New Method for Transformation Between Different Bases of Spherical Harmonic Oscillator
30	Salvatore Marco Giampaolo	Nonlocal Magic from the Entanglement Spectrum
31	Yifan Liu	Arithmetic Tuning of Dynamical Critical Exponents in Quasiperiodic Localization Transitions
32	Wen-Tao Xu	Detecting Topological Phase Transitions with String Order Parameters Associated with Emergent 1-Form Symmetry
33	Luyang Li	Quantum-Circuit Implementation of Non-Markovian Collision Models: Accuracy, Circuit Complexity, and Representation Dependence
34	Andrea Solfanelli	Error Correction and Quantum Information Spreading on Sparse Random Graphs
35	Hong Jiang	Quantum Phase Transitions and Quantum-Information Characterization of a Non-Hermitian XY Chain with Staggered Dzyaloshinskii–Moriya Interactions
36	You Zhou	(Shallow) Phase Circuits for Quantum Randomness and Measurements
37	Yuji Zhang	Timescale Bounds on the Quantum Fisher Information of Thermal Probes
38	Beibei Tian	Stability of Many-Body Critical Phases
39	Haoyu Chu	Sparse Regression Enhanced Neural Operator for Learning and Identifying Energy-Based PDEs
40	Yajie Li	Stochastic Dynamics and Bifurcation Control of a Generalized Tristable Rayleigh-Duffing System with Fractional Inertial Element and Time Delay Feedback Under Combined Recycling Noises
41	Teerapong Suksumran	Computational Tools for Measuring Non-Associativity in Einstein Velocity Addition
42	Xuebin Qin	Consistent Random-Source and Random-Field Frameworks for Maxwellian Spatial Correlation Analysis
43	Lumeng Xu	Green's Function-Based Correlation Propagation for Maxwellian Random Fields
44	Syl Shaw	Eigenvalue Statistics of the Spectral Localizer in the Anderson Model
45	Zhanchun Tu	First Integrals of the Axisymmetric Helfrich Equation
46	Qianqian Xia	Geometry of Constrained Connection Systems
47	Daniel Arrufat Vicente	Breakdown of Adiabaticity in Topological Quantum Liquids
48	Xiaoming Cai	Non-Hermitian Skin Effect without Point-Gap Topology in 2D Quasicrystals