

Session Program

Oct 5 - 10, 2025

A Panorama of Tensor Networks: from Condensed Matter to Quantum Field Theory, Holography and Beyond

Poster Session

Jagiellonian University, Collegium Nowodworskiego
Świętej Anny 12, 33-332 Kraków, Poland

Tue, October 7

4:45 PM

Poster Session

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Location: Jagiellonian University, Collegium Nowodworskiego, Świętej Anny 12, 33-332 Kraków, Poland

A coherent approach to quantum-classical optimization

Speaker

Andrés N. Cáliz

Perturbative tensor network varieties for correlated excitations

Speaker

Otto Theodor Primus Schmidt

Limitations of tensor-network approaches for optimization and sampling: A comparison to quantum and classical Ising machines

Speaker

Ms Anna Maria Dziubyna

Simulating finite-temperature phase diagrams using cluster expansions

Speaker

Sander De Meyer

The Dyson Series as a Matrix Product Operator

Speaker

Victor Vanthilt

Spin Seebeck Effect of Triangular-lattice Spin Supersolid

Speaker

Yuan Gao

Confinement and Dynamical Quantum Phase Transitions in \mathbb{Z}_2 Lattice Gauge Theories

Speaker

Dr Cheuk Yiu Wong

Variationally optimizing infinite projected entangled-pair states at large bond dimensions: A split corner transfer matrix renormalization group approach

Speaker

Jan Naumann

Strong long-range interactions and geometrical frustration in subwavelength lattices

Speaker

Domantas Burba

Stripe Order vs. Superconductivity: Revisiting the doped t-J model with iPEPS and AD

Speaker

Emilio Cortés Estay

Simulating Quantum Circuits with Tree Tensor Networks using Density-Matrix Renormalization Group Algorithm**Speaker**

Aditya Dubey

Gauge invariance for error detection in quantum simulations of the Schwinger model**Speaker**

Bárbara Andrade

Lattice Gauge theory using Symmetric tensor networks**Speaker**

Adwait Naravane

Phases of the Maple Leaf Antiferromagnet**Speaker**

Paul Ebert

Quantum Optimal Control Using Tensor Networks**Speaker**

Zeki Zeybek

String dynamics in 2+1 D lattice gauge theory**Speaker**

Kaidi Xu

Quantum simulations of lattice gauge theories**Speaker**

Rohan Joshi

Robustness of Magic in the quantum Ising chain via Quantum Monte Carlo tomography**Speaker**

Hari Timsina

Interplay of localization and topology in disordered dimerized array of Rydberg atoms**Speaker**

Maksym Prodius

Real-time simulation of pure Yang-Mills SU(3) glueballs scattering processes with MPS**Speaker**

Mattia Morgavi

7:15 PM