

Session Program

May 26 - 28, 2025

**Real-time and out-of-equilibrium dynamics
in the quantum HEP era**

talks1

CERN, 6/2-024 - BE Auditorium Meyrin

Mon, May 26

10:40 AM

talks1

Session | **Location:** CERN, 6/2-024 - BE Auditorium Meyrin

10:40 - 11:15 AM

Observation of string-breaking on a (2+1)D Rydberg quantum simulator

Speaker

Torsten V. Zache

11:15 - 11:50 AM

The Schwinger model as an open quantum system

Speaker

Karl Jansen

11:50 AM - 12:25 PM

Parton distribution functions through real-time evolution of tensor network states

Speaker

Manuel Schneider

12:25 PM

Tue, May 27

10:40 AM

talks1

Session | **Location:** CERN, 40/S2-D01 - Salle Dirac

10:40 - 11:15 AM

Mid-circuit measurements in quantum simulations of lattice gauge theories: from the quantum Zeno effect to error correction

Speaker

Matteo Michele Wauters

11:15 - 11:50 AM

Finite Group Lattice Gauge Theories and their Quantum Simulations

Speaker

Elisa Ercolessi

11:50 AM - 12:25 PM

Quantum Simulations driven by Many-Body Complexity

Speaker

Caroline Robin

12:25 PM

Wed, May 28

10:40 AM

talks1

Session | **Location:** CERN, 40/S2-C01 - Salle Marie Sklodowska-Curie

10:40 - 11:15 AM

Overcoming the entanglement barrier of the out of equilibrium simulations with tensor networks in 1D

Speaker

Dr Luca Tagliacozzo

11:15 - 11:50 AM

Time evolution of local information

Speaker

Claudia Artiano

11:50 AM - 12:25 PM

Quantum and quantum-inspired simulations of Lattice gauge theories

Speaker

Simone Montangero

12:25 PM

3:40 PM

talks1

Session | **Location:** CERN, 40/S2-C01 - Salle Marie Sklodowska-Curie

3:40 - 4:15 PM

Towards sign-problem free simulations of hadron scattering

Speaker

Marco Rigobello

4:15 - 4:50 PM

Projected Entangled Pair States for Lattice Gauge Theories with Dynamical Fermions

Speaker

Patrick Emonts

4:50 PM