

Session Program

13-16 Jul 2026



FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA



UNIVERSITY OF
LIVERPOOL



University of
Southampton

QuantHEP 2026

Contributed talk

Queen Mary University of London, Mile End Campus
Queens' Building, 327 Mile End Rd, London E1 4NS

Monday 13 July

16:30

Contributed talk

Session | **Location:** Maths Lecture Theatre, Building number 4 on the campus map | **Convener:** Xiaojun Yao

16:30–16:50

Fermionic Non-Gaussianity, Complexity, and Quantum Simulation of High-Energy Physics Models

Speaker

Paolo Stornati

16:50–17:10

Blind quantum computation based on parity quantum computing

Speaker

Qin Li

17:10–17:30

Quantum anomaly for benchmarking quantum computing

Speaker

Arata Yamamoto

17:30

Tuesday 14 July

16:30

Contributed talk

Session | **Location:** Maths Lecture Theatre, Building number 4 on the campus map | **Convener:** Paolo Stornati

16:30–16:50

Studying 2+1D fermionic systems with adaptive variational quantum algorithms

Speaker

Nico Dichter

16:50–17:10

Background electric field effects in (2+1)-QED from digital quantum simulation

Speaker

James Hancock

17:10–17:30

Preparing thermal states of frustrated quantum spin systems using 139 qubits

Speaker

Mr Lucas Katschke

17:30

Wednesday 15 July

15:00

Contributed talk

Session | **Location:** Maths Lecture Theatre, Maths Lecture Theatre | **Convener:** Alessio Celi

15:00–15:15

Towards Quantum Simulation of Neutrino-Nucleus Many-Body Dynamics

Speaker

Minoo Kabirnezhad

15:15

16:30

Contributed talk

Session | **Location:** Maths Lecture Theatre | **Convener:** Emanuele Mendicelli

16:30–16:50

Quantum Simulation of False Vacuum Decay on Current Quantum Hardware

Speaker

James Ingoldby

16:50–17:10

Towards quantum simulations of perturbative QFT processes

Speaker

Herschel Chawdhry

17:10–17:30

Scattering Amplitudes on a Quantum Annealer

Speaker

Graham Van Goffrier

17:30

Thursday 16 July

12:30

Contributed talk

Session | **Location:** Maths Lecture Theatre, Building number 26 on the campus map | **Convener:** Bipasha Chakraborty

12:30–12:50

Phase transitions in parametrized quantum circuits

Speaker

Xiaoyang Wang

12:50

14:00

Contributed talk

Session | **Location:** Drapers Lecture Theatre, Building number 26 on the campus map | **Convener:** Nico Dichter

14:00–14:20

Early Fault-Tolerant Ground State Energy Estimation for Nuclear Systems

Speaker

Marina Maneyro

14:20–14:40

Real-time dynamics of non-Abelian gauge theories: from Tensor Networks to Quantum Processors

Speaker

Emil Mathew

14:40

14:40

Contributed talk

Session | **Location:** Drapers Lecture Theatre | **Convener:** Lucas Katschke

14:40–15:00

Error-Mitigated Quantum Simulation of Lattice Gauge Theory

Speaker

Toshiaki Kaji

15:00–15:20

Hilbert space fragmentation at the origin of disorder-free localisation in the lattice Schwinger model

Speaker

Dr Jared Jeyaretnam

15:20