

Tuesday 30 September

09:00 **Keynote Speakers** Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze 09:00-09:40 Multiple-observable entropic uncertainty relations and entanglement detection Speaker Chiara Macchiavello 09:40-10:20 Structural transitions in two-dimensional Coulomb crystals Speaker Carlo Sias 10:20 10:50 **Keynote Speakers** Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze 10:50-11:30 Quantum functional testing Speaker **Daniel Braun** 11:30 15:00 **Keynote Speakers** Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze 15:00-15:40 Nonstabilizerness in the monitored dynamics of complex quantum systems Speaker

Davide Rossini

15:40

Wednesday 1 October

09:00

Keynote Speakers

Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze

09:00-09:40 Finite Group Lattice Gauge Theories and their Quantum Simulations

Speaker

Elisa Ercolessi

09:40-10:20

The Josephson effect moving Quantum Computation through the Macroscopic Quantum

Speaker

Francesco Tafuri

10:20 10:50

Keynote Speakers

Session

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10:50-11:30

Hidden Markov models - classical and quantum mechanisms, and beyond

Speaker

Andreas Winter

11:30 15:00

Keynote Speakers

Session

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15:00-15:40 Tensor Network Algorithms for Quantum Simulation

Speaker

Simone Montangero 15:40

Thursday 2 October

09:00 **Keynote Speakers** Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze 09:00-09:40 Transitions in monitored quantum circuits Speaker Rosario Fazio False vacuum decay in ferromagnetic superfluids 09:40-10:20 **Speaker** Giacomo Lamporesi 10:20 10:50 **Keynote Speakers** Session Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze **Certified many-body physics** 10:50-11:30 Speaker Antonio Acin 11:30 15:00 **Keynote Speakers** Session Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze Quantum spin liquids in cavity QED Speaker **Darrick Chang** 15:40

Friday 3 October

09:00 **Keynote Speakers** Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze 09:00-09:40 Semiclassical simulations of dissipative quantum many-body systems Speaker Peter Rabl Correlation imaging, from 3D to hyperspectral 09:40-10:20 Speaker Milena D'Angelo 10:20 10:50 **Keynote Speakers** Session Location: Bari (Italy) - Palazzo dell'Acqua, Conference Room, Palazzo dell'Acqua, Via Salvatore Cognetti, 36 70121 Bari (BA), Italy Room: Sala Conferenze 10:50-11:30 Quantum metrology - almost perfect theoretical framework with just a few cracks **Speaker** Rafał Demkowicz-Dobrzański

11:30