

Session Program

30 August 2026 to 6 September 2026

**Zakopane 2026 Conference on Nuclear
Physics**

Nuclear Theory

Tuesday 1 September

09:00

Nuclear Theory: Ab initio approaches to nuclear structure

Session | Convener: Dario Vretenar

09:00–09:30

Ab initio Self-Consistent Green's function computations of nuclei

Speaker

Carlo Barbieri

09:30–10:00

Ab Initio Nuclear Structure with Deep Learning: Bridging Light Nuclei and Nuclear Matter

Speaker

Pengwei Zhao

10:00–10:20

Microscopic optical potentials: new results and perspectives

Speaker

Paolo Finelli

10:20–10:40

Double- β decay: predicting the rates of the slowest decays

Speaker

Javier Menéndez

10:40–10:55

Shell Evolution in Neutron-Rich Nuclei from Chiral Two- and Three-Nucleon Forces

Speaker

Anil Kumar

11:00

11:30

Nuclear Theory: Nonequilibrium Phenomena

Session | Convener: Dario Vretenar

11:30–12:00

Generation of Spin in Fission Fragments from Microscopic Theory

Speaker

Guillaume Scamps

12:00–12:30

Microscopic dynamics of nuclear superfluids: vortices and nuclei in neutron star crusts

Speaker

Gabriel Wlazłowski

12:30–12:50

Microscopic Description of Multinucleon Transfer Reactions with Relativistic TDDFT: Mass and Spin Distributions

Speaker

Dandan zhang

12:50-13:10

Beyond the barotropic approximation: an asymptotically-causal nuclear metamodel for neutron stars**Speaker**

Marco Antonelli

13:10-13:25

Configuration-interaction time-dependent density functional theory for nuclear dynamics**Speaker**

Yiping Wang

13:30

16:00

Nuclear Theory: Quantum Computing in Low-Energy Nuclear Physics Session

16:00-16:30

Using quantum computers for nuclear structure studies**Speaker**

Denis Lacroix

16:30-17:00

Toward Quantum Simulation of Nuclear Reactions: From State Preparation to Cross-Section Extraction**Speaker**

Ionel Stetcu

17:00-17:20

Nuclear dynamics on digital quantum computers**Speaker**

Alessandro Roggero

17:20-17:40

Nuclear Structure and Reactions using Quantum Computers**Speaker**

Dr Gautam Rupak

17:40-17:55

Quantum computation for nuclear structure with a low-depth variational circuit**Speaker**

Dr Chandan Sarma

18:00