

QM 2022



Monday 4 April 2022 - Sunday 10 April 2022
Auditorium Maximum UJ

Scientific Programme

Quark Matter 2022 is the XXIX International Conference on Ultrarelativistic Heavy-Ion Collisions. The aim of this conference is to bring together theoretical and experimental physicists from across the world to discuss new developments in high energy heavy ion physics. The focus of the discussions is on fundamental understanding of strongly interacting matter at extreme conditions formed in ultrarelativistic heavy-ion collisions which relates to the state of the early universe.

Following the previous Quark Matter conference in Wuhan, China in 2019, the current meeting will be held in Kraków, Poland from April 4 to April 10, 2022. Recent meetings have taken place in Venice, Italy in 2018 and Chicago, USA in 2017.

Initial state physics and approach to thermal equilibrium

Chirality, vorticity and spin polarization

QCD matter at finite temperature and density

Jets, high-pT hadrons, and medium response

QGP in small and medium systems

Lattice QCD and heavy-ion collisions

Correlations and fluctuations

Strongly coupled systems

Ultra-peripheral collisions

Baryon rich matter, neutron stars, and gravitational waves

Heavy flavors, quarkonia, and strangeness production

New theoretical developments

Electroweak probes

Hadron production and collective dynamics

Future facilities and new instrumentation

Light nuclei production