

Diffraction and Low-x 2024



Sunday 8 September 2024 - Saturday 14 September 2024

Hotel Tonnara Trabia, Palermo, Sicily

Scientific Programme

Low x, PDFs, and saturation

Conveners: Francesco Giuli, Tuomas Lappi, Roman Lavicka

PDFs at low and high x
New results within the Color Glass Condensate model
Saturation and evolution
Saturation in heavy ion

Diffraction in pp and AA

Conveners: Lucian Harland Lang, Ken Osterberg, Murilo Rangel, Rafal Staszewski

Soft diffraction at the hadron colliders
Total and inelastic cross section measurements
Odderon physics
Central exclusive production of low-mass particles
Glueball production
Forward physics at the LHC
Forward detectors
Phenomenology of gap survival probability
Monte Carlo for soft processes
Heavy ion collisions at RHIC and EIC
Phenomenology of diffraction off nuclei
Hard diffraction at the hadron colliders
Monte Carlo for hard processes

Ultrapерipheral collisions and gamma-gamma physics

Conveners: Lydia Beresford, Victor Goncalves, Georgios Krintiras, Riccardo Longo

Gamma-p and gamma-gamma collisions at hadron colliders
Beyond standard model and photon exchange processes
Ultrapерipheral collisions

Spin physics

Conveners: Barbara Badelek, Umberto D'Alesio

New results on spin physics
Spin and polarization physics
Prospects in spin physics
Generalized parton distributions

Transverse momentum dependent PDFs

Results on QCD and Hadronic Final States

Conveners: Marco Bonvini, Cristian Baldenegro, Josu Cantero Garcia, Francesco G. Celiberto

pQCD predictions

Jet cross sections and algorithms

Jet substructures

Multiplicities

Vector meson, pion, etc. productions

Formal developments in QCD (resummation, factorization, evolution)

New results in the BFKL physics

New results in the color dipole/kt-factorization approach

Progress in AdS/QCD, integrability and related topics

Diffraction in ep and eA

Conveners: Rachel Montgomery, Marta Ruspa, Zhoudunming Tu

Inclusive DIS: total cross sections, structure functions, heavy flavors

Inclusive diffraction and dijets in DIS

Hard diffractive photoproduction

Exclusive final states in diffractive DIS (vector mesons, DVCS, etc.)

Analyticity/duality models of inclusive/diffractive reactions; Pomeron trajectory

Diffraction at the EIC

Forward detectors and Roman pots