

Diffraction and Low-x 2018



Sunday 26 August 2018 - Saturday 01 September 2018

Reggio Calabria, Italy

Scientific Programme

Diffraction in e-p and e-A collisions

****Conveners:**** Jochen Bartels, Abhay Deshpande, Marta Ruspa

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

Diffraction and photon physics in hadron-hadron and heavy-ion collisions

****Conveners:**** Valentina Avati, Alan Martin, Christina Mesropian, Boris Kopeliovich

Soft and hard diffraction at the hadron colliders
 Total and inelastic cross section measurements
 Odderon physics
 Central exclusive production
 Forward physics at the LHC
 Forward detectors
 Gamma-p and gamma-gamma collisions at hadron colliders
 Low-x physics at LHC
 Beyond standard model and photon exchange processes
 Phenomenology of gap survival probability
 Monte Carlo for soft and hard processes
 Heavy ion collisions at RHIC and EIC
 Phenomenology of diffraction off nuclei
 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

QCD and parton saturation physics

****Conveners:**** Victor Goncalves, Dmitry Ivanov, Timothy Raben

Perturbative QCD and factorization issues
 Leading-twist diffraction and the breakdown of pQCD factorization theorems

Leading-twist diffractive DIS and nuclear shadowing
Non-universal antishadowing
Progress in AdS/QCD and related topics
Diffractive dijet, hadrons light-front wavefunction from AdS/QCD, and color transparency
New results in the BFKL physics
New results in the color dipole/kt-factorization approach
New results within the Color Glass Condensate model
Saturation and evolution
Diffraction from non-perturbative QCD

Low-x, PDFs and hadronic final state

****Conveners:**** Amanda Cooper Sarkar, Paolo Gunnellini, Lech Szymanowski

PDFs at low and high x
Jet cross sections
Fat jets
Multiplicities
Vector meson, pion, etc. productions