

# Diffraction 2016

## International Workshop on Diffraction in High-Energy Physics

<http://www.cs.infn.it/diff2016/>

Santa Tecla di Acireale (Italy)  
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UNIVERSITÀ  
DELLA CALABRIA



Istituto Nazionale di Fisica Nucleare (Italy)

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DESY, Hamburg (Germany)



EMMI, Darmstadt (Germany)



CERN, Geneva (Switzerland)

### Conveners and Topics

MARTA RUSPA (ruspa@mail.desy.de)

DOUGLAS ROSS (dar@phys.soton.ac.uk)

#### ► Diffraction in e-p collisions

- 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.)
- Generalized parton distributions
- Analyticity/duality models of inclusive diffractive reactions; Pomeron trajectory
- Processes with Odderon exchange

CHRISTINA MESROPIAN

(christina.mesropian@rockefeller.edu)

RISTO ORAVA (risto.orava@helsinki.fi)

#### ► Diffraction in hadron-hadron collisions (experiment)

- Soft and hard diffraction at the hadron colliders (RHIC, Tevatron, LHC)
- Total and inelastic cross section measurements
- central exclusive production (RHIC, Tevatron, LHC)
- Forward physics at the LHC
- Gamma-p and gamma-gamma collisions at hadron colliders
- Low- $x$  physics at LHC

BORIS KOPELIOVICH (boris.kopeliovich@usm.cl)

#### ► Diffraction in hadron-hadron collisions (phenomenology/theory)

- Single and double diffraction dissociation
- Multi-gap diffraction
- Diffractive Higgs production at forward rapidities of heavy flavours, gauge bosons, Drell-Yan dileptons and Higgs
- Phenomenology of gap survival probability
- Monte Carlo for soft processes

ZEIN-EDDINE MEZIANI (meziani@temple.edu)  
JACQUES SOFFER (jacques.soffer@gmail.com)

#### ► Spin Physics

- New results on spin physics
- Spin and polarization physics
- Prospects in spin physics

WLODEK GURYN (guryn@bnl.gov)

#### ► Diffraction in nuclear physics

- Heavy ion collisions at RHIC
- Phenomenology of diffraction off nuclei
- Ultraperipheral collisions
- QCD studies of nuclear collisions

DMITRY IVANOV (d-ivanov@math.nsc.ru)

LARRY MCLERRAN (mclerran@quark.phy.bnl.gov)

#### ► Progress in QCD

- 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

### International Advisory Committee

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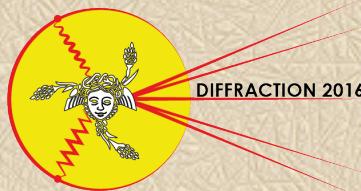
M. Capua	Cosenza
A. Papa	Cosenza (chair)
M. Rossi	Cosenza
A. Solano	Torino
E. Tassi	Cosenza

### Workshop Secretary

R. Bertelli INFN, Frascati

### DIFFRACTION 2016

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