

Les Rencontres de Physique de La Vallée d'Aoste
La Thuile, March 6-12, 2016



PRELIMINARY SCIENTIFIC PROGRAMME



Monday, March 7

Cosmology and Astroparticle Physics

8.30 - 11:30

First Observation of Gravitational Waves
The PLANCK Satellite
New Results from FERMI
Recent Results from XENON
The DARKSIDE physics program and its recent results
Results on electrons and positrons and other related subjects at AMS

Frédérique Marion, Annecy
Paolo Natoli, Ferrara
Raffaella Bonino, Torino
Patrick Decowski, NIKHEF
Davide D'Angelo, Milano
Marco Incagli, Pisa

Cosmology and Astroparticle Physics - continued

16.00-19:00

The latest results and upgrades of the GERDA experiment
Recent Results from CUORE
A resuscitating way to measure the electron-neutrino mass.
Recent Results from the NOVA Experiment
Discovery of $\nu\tau$ Appearance and Recent Results from OPERA
Recent results from T2K

Eduardo Medinaceli, Padova
Carmine Pagliarone, Cassino
Alvaro De Rujula, CERN
Group Craig, Un. of Virginia
Tsutomu Fukuda, Toho
Mark Scott, TRIUMF

Tuesday, March 8

Cosmology and Astroparticle Physics - continued

08:30-9:30

New results from RENO and future RENO-50 Project
Status Report and Physics Perspectives of JUNO

Soo-Bong Kim, Seoul
Cecile Jollet-Meregaglia

QCD and Heavy Flavour Physics

9:30-12:00

Pentaquarks
BELLE: XYZ--mesons, Past, Present & Future
XYZ studies at BESIII
Heavy quark spectroscopy at LHCb

Luciano Maiani, Roma
Stephen Lars Olsen, Daejeon
Francesca De Mori, Torino
Daniel Johnson, CERN

QCD and Heavy Flavour Physics - continued

16:30-18:45 (135)

Results and perspectives from the NA62 Experiment at CERN
Towards improving the new physics reach of CP violation in kaon mixing
Rare beauty and charm decays at LHCb
Final results of the MEG Experiment
SM vs. NP in $b \rightarrow s$ transitions
Measurements of CP violation and mixing in Charm and Beauty at LHCb

Michal Koval, Bratislava
Filippo Sala, Paris
Thomas Blake, Warwick
Toshimori Mori, Tokyo
Quim Matias, Barcelona
Mirco Dorigo, Lausanne

Young Scientists Forum 1

18:45-19:30

Studies of radiative charm decays at Belle
Recent results on J/ψ radiative decays from BESIII
Double Parton Scattering at D0

Tara Nanut, Ljubljana
Jingqing Zhang, Beijing
Olga Gogota, Kyiv

Wednesday, March 9

QCD and Heavy Flavour Physics - continued

8.30-10:30

New heavy flavor states and recent results from the Tevatron
B Physics Measurements at ATLAS
Observation of CP violation in the decays $B \rightarrow D^*$
QCD, Heavy Flavour and soft Physics at CMS
New Physics effects in flavor physics

Peter Garbincius, Fermilab
Pavel Reznicek, Prague
Markus Roehrken
Nuno Leonardo, LIP
Monika Blanke, Karlsruhe

QCD and Electroweak Physics

10:30-12:00

Recent Theoretical Progress in QCD and EW Corrections
QCD Measurements (soft QCD and W, Z, photons jets) at ATLAS
Electroweak physics in the forward direction at the LHC

Stefano Pozzorini, Zurich
Zdenek Hubacek, Prague
Stephen Farry, Liverpool

XXX Years

16.30-18:30

Remembering Guido Altarelli
Thirty Years of Physics
General overview and future prospects of AMS

Keith Ellis, Durham
Fernando Ferroni, Roma
Samuel C.C. Ting

Young Scientists Forum 2

18:45-19:30

Measurement of four-jet differential cross sections in 8 TeV proton-proton collisions using the ATLAS detector.

Sabrina Sacerdoti, Buenos Aires

Measurement of the transverse momentum of the Higgs decaying to W and Z

Lorenzo Villani, Firenze

b-flavour tagging in pp collisions

Vincenzo Battista, EPFL

Thursday, March 10

Top and Electroweak Physics

8.30-12:00

Top Production at the Tevatron
top and V/EWK measurements at the Tevatron (CDF)
EWK Diboson Production at ATLAS
W and Z production (inclusive, exclusive, dibosons) at CMS
Top production Measurements at CMS
Top-quark physics
Top Physics Measurements at ATLAS

Kenneth Bloom, Lincoln
Pavol Bartos, Bratislava
Alexander Solodkov, Protvino
Ping Tan, Rochester
Abideh Jafari, Louvain
Roberto Franceschini, CERN
Marina Cobal, Udine

Search for New Physics

16:30-18:45

Study of Top properties with the CMS Detector
Indirect detection of Minimal Dark Matter
SUSY Searches at Run 2 ATLAS (including BSM Higgs)
New physics in final states with leptons or photons

Efe Yazgan, Ghent
Paolo Panci, Paris
Christian Ohm, LBL
Raffaella Radogna, Bari

Young Scientists Forum 3

18:45-19:30

Forward-backward asymmetry in Z and determination of the effective weak mixing angle

Lorenzo Sestini, Padova

Search for new Heavy charged Bosons decaying to a Lepton and Neutrino

Alberto Escalante Del Valle, CIEMAT

Friday, March 11

Higgs and New Physics

8.30-11:30

Measurement of Higgs mass and couplings: combination of LHC results
Higgs as BSM probe
Exotic searches at ATLAS
Diphoton anomaly at LHC
SUSY searches at CMS
Hints and hopes for physics beyond the SM

Susan Shatkin Gascon, Lyon
David Marzocca, Zurigo
David Strom, Oregon
Marco Nardecchia, Cambridge
Robert J. Bainbridge, London
Marcela Carena, Fermilab

Higgs and New Physics - continued

16:30-19:30

New physics in final states with jets or vector bosons
Searches with Boosted Jets with Sub-Structure
Heavy Vectors
Relaxions
Searches for dark matter and new physics with unconventional signatures
Dark Matter Searches

Anne Laure Pequegnot, Lyon
David Lopez Mateos, Harvard
Andrea Thamm, Mainz
Matthew McCullough, CERN
Claudia Wulz, HEPHY
Arelly Cortes-Gonzales, Barcelona

Saturday, March 12

Perspectives

9:00 – 11:00

The Upgrade of the Pierre Auger Observatory
The DUNE Neutrino Project
Overview of the CLIC physics potential
Muon Colliders

Darko Veberic, Karlsruhe
Michelle Stancari, Fermilab
Marco Szalay, Munich
Carlo Rubbia