

Scientific programme

26 August 2013

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New Frontiers in Physics

ICNFP 2013

28 August-5 September 2013
Kolymbari, Crete, Greece

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Wednesday, 28 August 2013, Lectures

08h15-08h30 Opening address

Session 1 Chairman : P. Jetzer Assistant : M. Janik

08h30-09h20 K. BENAKLI Extra dimensions 45+5'

09h20-10h10 P. PICKL Interpretations of quantum mechanics 45+5'

10h10-11h00 J.-D. BANCAL Quantum nonlocality 45+5'

11h-11h20 COFFEE BREAK

Session 2 Chairman : A. Sorin Assistant : M. Szymański

11h20-12h10 H. SATZ Hadrosynthesis and Quark Confinement 45+5'

12h10-13h00 C.-Y. WONG Foundation of Hydrodynamics for Systems with Strong Interactions 45+5'

13h00 LUNCH

Session 3 Chairman : A. Lazopoulos Assistant : K. Poniatowska

16h20-17h10 S. SPEZIALE Loop quantum gravity, twisted geometries and twistors 45+5'

17h10-18h00 G. GABRIELSE Particle Dipole Moments: Most Sensitive Tests of the Standard Model 45+5'

18h00-18h20 COFFEE BREAK

Session 4 Chairman : A. Dolgov Assistant : M. Szymański

18h20-19h10 S. KATSANEVAS Astroparticle physics and cosmology – status and future 45+5'

19h10-20h00 E. DIAMANTI Quantum Entanglement 45+5'

20h00 DINNER

20h30 E. LARENTZAKI, After-dinner talk, History of Crete, OAC veranda

Thursday, 29 August 2013, Plenary

08h15-8h30 Welcome

Session 1 Chairman: R. Stock Assistant : M. Janik

Heavy ion physics

08h30-09h00 P. BRAUN MUNZINGER Relativistic nucleus-nucleus collisions: goals, achievements and future directions 25+5'

09h00-09h30 U. WIEDEMANN The fluid dynamic paradigm of relativistic heavy ion collisions 25+5'

Mathematical physics, gravity, particle and astroparticle physics

09h30-10h00 A. CHAMSEDDINE Standard Model and Beyond Including Gravity in Noncommutative Geometry 25+5'

10h00-10h30 L. RANDALL Dark Matter 25+5'

10h30-11h00 A. LAZOPOULOS Unravelling the production of the Higgs boson at the LHC 25+5'

11h00-11h20 COFFEE BREAK

Session 2 Chairman: V. Shevchenko Assistant : Ł. Graczykowski

Heavy ion physics, Strings

11h20-11h50 H. SATZ The Quarkonium Analysis of the QGP 25+5'

11h50-12h20 E. KIRITSIS Strings, quantum fields and the UV landscape 25+5'

Particle and astroparticle physics, cosmology

12h20-12h50 N. MAVROMATOS Neutrinos in the Early Universe, Dark Matter and Matter-Antimatter asymmetry 25+5'

12h50-13h20 V. MITSOU Probing neutrino physics at LHC through R-parity breaking Supersymmetry 25+5'

13h30 LUNCH

Session 3 Particle and astroparticle physics, cosmology Chairman: M. Karliner Assistant : M. Szymański

17h00-17h30 D. D'ENTERRIA Connections between the collider and cosmic frontiers 25+5'

17h30-18h00 J. DE MELLO NETO The Pierre Auger Observatory: cosmic rays at the highest energies 25+5'

18h00-18h20 COFFEE BREAK

Session 4 Interdisciplinary (biology, gravity) Chairman: L. Kluberg Assistant : M. Janik

18h20-18h50 G. ZWEIG How does the ear respond to tones? 25+5'

18h50-19h20 Ph. JETZER Science with eLISA 25+5'

19h20 DINNER

20h30 Departure to AVRA Hotel (AVRA is 20' walk from OAC)

21h00 D. DENEGRI, LHC@CERN: from concept to spectacular discoveries in science, public talk in AVRA Hotel, Kolymbari

Friday, 30 August 2013, Plenary

Session 1 Particle physics, heavy ion physics, LHC Chairman: P. Braun-Munzinger Assistant : M. Janik

08h30-09h00 E. TSESMEELIS CERN and the European Strategy for Particle Physics - The High Energy Frontier 25+5'

09h00-09h30 O. ROHNE Overview of physics results from the ATLAS experiment 25+5'

09h30-10h00 T. DORIGO CMS overview 25+5'

10h00-10h30 M. BRITSCH Overview of LHCb results on CP violation 25+5'

10h30-11h00 L. RAMELLO Recent results on Pb-Pb and p-Pb collisions from ALICE 25+5'

11h00-11h20 COFFEE BREAK

Session 2 Memorial session for Prof. Polikarpov Chairman: B. Sharkov Assistant : Ł. Graczykowski

11h20-11h25 B. SHARKOV Opening

11h25-12h00 V. I. ZAKHAROV Strong-coupling theories on the lattice and in the continuum: homage to Mikhail I. Polikarpov 25+5'

12h00-12h35 V. SHEVCHENKKO Facets of Decoherence: Chiral Magnetic Effect in Heavy Ion Collisions 25+5'

12h35-13h05 N. BRAMBILLA Effective field of strong interactions 25+5'

13h05-13h35 B. KOPELIOVICH Jet quenching: a non-energy-loss scenario 25+5'

13:35 LUNCH

17h00-18h20 PARALLEL SESSIONS

18h30 Meet in the parking of OAC for transfer to Chania

19h30 Dinner in Chania

21h00 E. TSESMEELIS, Public talk in greek language in Chania

Saturday, 31 August 2013, Plenary

Session 1 Particle physics Chairman : G. Wolschin Assistant : Ł. Graczykowski

08h30-09h00 K. ASSAMAGAN Review of results on Higgs searches from the ATLAS experiment 25+5'

09h00-09h30 M. V. MARONO Higgs Physics at the CMS 25+5'

09h30-10h00 I. PERUZZI Recent BABAR results on dark matter and light Higgs searches and on CP- and T-violation 25+5'

10h00-10h30 S. HALL Rare Decays at LHCb 25+5'

10h30-11h00 K. BENAKLI Supersymmetry breaking and Dirac gauginos 25+5'

11h00-11h20 COFFEE BREAK

Session 2 Heavy ion physics Chairman: M. Lisa Assistant : M. Janik

11h20-11h50 R. STOCK Universality of QCD Hadronization ? 25+5'

11h50-12h20 A. KISIEL Overview of femtoscopy in LHC experiments 25+5'

12h20-12h50 B. HUANG Overview of Recent Results from STAR 25+5'

12h50-13h20 E. ZABRODIN Hexagonal flow as interplay of elliptic and triangular flows 25+5'

13:20 LUNCH

Session 3 Astroparticle physics, cosmology, interdisciplinary Chairman : J. De Mello Neto Assistant : M. Szymański

16h05-16h35 C. BACCIGALUPI PLANCK highlights 25+5'

16h35-17h05 R. HOFMANN Yang-Mills thermodynamics and its implications for the large-angle anomalies of the CMB 25+5'

17h05-17h35 J.J. GAARDHOJE CMB methods for Heavy ion data 25+5'

17h35-17h55 COFFEE BREAK

17h55-19h20 PARALLEL SESSIONS

19h20 DINNER

20h30 Meet in OAC parking for transfer to the “ancient” open theater

21h30 Concert of Ros Daly and his orchestra in the “ancient” open theater

Sunday, 1 September 2013

Conference Excursion

19h30 Dinner in OAC

21h00-22h00 Public talk, G. ZWEIG, Concrete Quarks: The Beginning of the End, OAC Auditorium

Monday, 2 September 2013, Plenary

Session 1 Particle physics, masterclass Chairman : Y. Foka Assistant : M. Janik

08h30-09h00 D. DENEGRI LHC Physics Highlights 25+5'

09h00-09h30 U. BILOW International Masterclasses – hands on particle physics 25+5'

09h30-09h50 M. BUGGE Physics of Z and W path + ATLAS Z Path MasterClass 20'

09h50-10h05 S. VOURAKIS ATLAS Z Path YPATHIA MasterClass 15'

10h05-10h20 U. BILOW ATLAS W Path – real data from the LHC for high school students 15'

10h20-10h50 K. CECIRE The CMS Masterclass and Particle Physics Outreach 25+5'

10h50-11h00 DISCUSSION 10'

11h00-11h20 COFFEE BREAK

Session 2 Particle physics, heavy ion physics, masterclass Chairman: S. Mrówczyński Assistant : Ł. Graczykowski

11h20-11h50 P. DI NEZZA Jet Physics with ALICE at the LHC 25+5'

11h50-12h05 P. DI NEZZA ALICE MasterClass on Jet Quenching 15'

12h05-12h20 M. JANIK ALICE MasterClass on strangeness 15'

12h20-12h50 CH. KOURKOUMELI HEP Outreach Activities 25+5'

12h50-13h00 DISCUSSION 10'

13h00-13h30 C. MUNOZ CAMACHO The 3D structure of the hadrons: recent results and experimental program at Jefferson Lab 25+5'

13:30 LUNCH

Session 3 Chairman : C.-Y. Wong Assistant : M. Szymański

Heavy ion physics

16h45-17h10 L. P. CSERNAI Rotation and turbulent instability in peripheral heavy ion collisions 20+5'

17h10-17h30 COFFEE BREAK 20'

Quantum optics

17h30-18h00 E. COHEN Revisiting backward causality with the help of weak measurements 25+5'

18h00-18h30 V. AKULIN Description of Quantum Entanglement with Nilpotent Polynomial 25+5'

18h30-19h30 Poster session, Masterclass demo hands on

19h30 Dinner

21h00 OPERA GALA, concert at the OAC auditorium

Tuesday, 3 September 2013, Plenary

Session 1 Chairman : A. Faessler Assistant : Ł. Graczykowski

Particle physics, QCD

08h30-09h00 I. ANTONIADIS Mass hierarchy beyond standard model 25+5'

09h00-09h30 W. PLESSAS Relativistic quark model description of low-energy hadrons 25+5'

09h30-10h00 M. KARLINER Doubly heavy tetraquarks and baryons 25+5'

Heavy ion physics, particle physics

10h00-10h30 C. A. LUTKEN Infinite Symmetry in the Quantum Hall Effect 25+5'

10h30-11h00 C. TSALLIS Nonextensive statistical mechanics and high energy physics 25+5'

11h00-11h20 COFFEE BREAK

Session 2 Particle physics, heavy ion physics Chairman: L. Csernai Assistant : M. Janik

11h20-11h50 B. SHARKOV International FAIR: challenges and chances in Heavy Ion Physics 25+5'

11h50-12h20 F. IAZZI Doubly strange system physics with antiprotons at PANDA 25+5'

12h20-12h50 J. BIELCIKOVA Hard Probes at RHIC 25+5'

12h50-13h20 G. WOLSCHIN Aspects of heavy-ion collisions at the LHC 25+5'

13:30- 15:00 LUNCH BREAK

Session 3 Extra Lecture Chairman : L. Turko Assistant : M. Szymański

15h00-16h30 J. ERDMENGER Gauge/Gravity Duality: New methods for strongly coupled systems 80+10'

16h30-16h45 COFFEE BREAK 15'

Session 4 Perspectives: upgrades Chairman : I. Peruzzi Assistant : M. Szymański

16h45-17h10 D. LUCCHESI The LHCb upgrade 20+5'

17h10-17h40 P. MORETTINI Upgrade program and physics prospects of the ATLAS experiment 25+5'

17h40-18h05 T. PEITZMAN Upgrade of the ALICE experiment 20+5'

18h05-18h10 BREAK

18h10-19h50 PARALLEL SESSIONS

20h30 CONFERENCE DINNER

Wednesday, 4 September 2013, Plenary

Session 1 Chairman: H. Zbroszczyk Assistant : Ł. Graczykowski

Mathematical physics, gravity, quantum optics, particle physics

08h30-09h00 S. MAJID Gravity induced by quantum spacetime 25+5'

09h00-09h30 N. KOROLKOVA Quantumness of Gaussian Discord 25+5'

09h30-10h00 R. PLACAKYTE Recent precision measurements of the proton structure at HERA 25+5'

Heavy ion physics

10h00-10h30 K. REDLICH Polyakov loop and charge fluctuations as probes of QCD phase transition 25+5'

10h30-11h00 M. LISA Results from the STAR Beam Energy Scan Program 25+5'

11h00-11h20 COFFEE BREAK

Session 2 Perspectives: future facilities Chairman: M. Praszalowicz Assistant : M. Janik

11h20-11h50 P. B. GOSSIAUX Coherence effects in heavy quark and quarkonium production in ultrarelativistic heavy ion collisions 25+5'

11h50-12h20 A. MISCHKE Open Heavy Flavour 25+5'

12h20-12h50 S. SEDDIKI The Compressed Baryonic Matter experiment 25+5'

12h50-13h20 A. HERLERT The NUSTAR program at the FAIR facility 25+5'

13:20 LUNCH

Session 3 Quantum optics, particle physics Chairman: G. Zweig Assistant : M. Szymański

16h50-17h20 R. RUBINSTEIN Report from ICFA 25+5'

17h20-17h50 A. FAESSLER Search for the Cosmic Neutrino Background and the Nuclear Beta Decay (KATRIN and MARE) 25+5'

17h50-18h10 COFFEE BREAK

18h10-19h50 PARALLEL SESSIONS

19h50 DINNER

20h20-20h40 L. KSANFOMALITY, Life in Venus , After-dinner talk, OAC veranda

Thursday, 5 September 2013, Plenary

Session 1 Quantum optics, particle physics Chairman : S. Majid Assistant : M. Szymański

08h30-09h00 G. ALTARELLI The Higgs: so simple yet so unnatural

09h00-09h30 J.-D. BANCAL Quantum non locality based on finite-speed causal influences leads to superluminal signalling 25+5'

09h30-10h00 H. STROEHER JEDI – Juelich Electric Dipole Moment Investigations 25+5'

10h00-10h30 A. SORIN The NICA project at JINR Dubna 25+5'

10h30-10h50 COFFEE BREAK

10h50-13h35 PARALLEL SESSIONS

13:35 LUNCH

Session 2 Perspectives Chairman : A. Stavinskiy Assistant : Ł. Graczykowski

17h00-17h30 H. N. LE Superpolynomial complex quantum states 25+5'

17h30-18h00 S. ARFAOUI CLIC 25+5'

18h00-18h20 COFFEE BREAK

Session 3 Perspectives Chairman : G. Altarelli Assistant : M. Janik

18h20-18h50 B. FOSTER International Linear Collider 25+5'

18h50-19h20 C. ALEXA Report from ECFA 25+5'

19h20-19h50 A. DOLGOV Three P in cosmology: progress, problems and perspectives 25+5'

19h50-20h00 Closing of the conference

20h00 DINNER

Friday, 30 August 2013, Parallel

Session 1 Particle physics overviews Chairman : D. D'Enterria Assistant : M. Girard

17h00-17h25 G. SEDOV Measurements of W and Z production in ATLAS 20+5'

17h25-17h50 S. F. BRAZZALE Overview of SUSY results from the ATLAS experiment 20+5'

17h50-18h15 M. MARTINEZ Highlights from CDF 20+5'

Session 2 QCD theory, heavy ion physics, lattice Chairman : K. Redlich Assistant : M. Szymański

17h00-17h20 H. SUGANUMA Analytical relation between quark confinement and chiral symmetry breaking in odd-number lattice QCD 15+5'

17h20-17h40 A. VAIRO Thermal widths of non-relativistic particles 15+5'

17h40-18h00 S. FLOERCHINGER Mode-by-mode hydrodynamics for relativistic heavy ion collisions 15+5'

18h00-18h20 Ch. HOELBLING Recent results from lattice QCD 15+5'

Session 3 Heavy ion physics (flow, charm, strangeness), QCD Chairman : M. Nardi Assistant : Ł. Graczykowski

17h00-17h20 J. MILOSEVIC Anisotropic flow of charged and strange particles in PbAu collisions at 158 AGeV measured in CERES experiment 15+5'

17h20-17h40 M. LISA A Tale of Two Programs: Condensed matter approach to dynamic systems at the micrometer and femtometer scales 15+5'

17h40-18h00 N. DAVIS Detecting critical fluctuations of the proton density in ion collisions at the NA49 experiment through improved intermittency analysis 15+5'

18h00-18h20 F. FLEURET A new experiment to measure charm production at the CERN SPS 15+5'

Session 4 Gravity, cosmology, interdisciplinary Chairman : M. Morikawa Assistant : M. Janik

17h00-17h20 G. DEBRECZENI Gravitational wave search algorithms on GPUs - a sensitivity jump 15+5'

17h20-17h40 T. TATSUMI Inhomogeneous chiral phase in the magnetic field 15+5'

17h40-18h00 A. ELITZUR Novel Temporal Paradoxes Offering Insights to the Nature of Time 15+5'

18h00-18h20 A. U. LUCCIO Undulator spin polarimetry for the eEDM 15+5'

Session 5 Particle physics, heavy ion physics Chairman : B. Kopeliovich Assistant : J. Crkovska

17h00-17h20 J. ADAM J/psi photoproduction in ultra-peripheral Pb+Pb and p+Pb collisions with ALICE 15+5'

17h20-17h40 J. NYSTRAND Ultraperipheral Pb+Pb collisions at the LHC 15+5'

17h40-18h00 M. SAUTER Recent results on J/Psi production at HERA 15+5'

18h00-18h20 K. GOULIANOS Predictions for Diffraction at the LHC Compared to Experimental Results 15+5'

Saturday, 31 August 2013, Parallel

Session 1 Astroparticle physics, cosmology, interdisciplinary Chairman : T. Dorigo Assistant : J. Crkovska

- 17h55-18h15 P. BELLI New results and perspectives of DAMA/LIBRA 15+5'
18h15-18h35 D. ZAPPALA Estimate of the neutron star masses through the field correlator method equation of state 15+5'
18h35-18h55 L. BONECHI Forward physics with the LHCf experiment: a contribution of LHC to the cosmic-ray physics 15+5'
18h55-19h20 J. C. MAESTRO Top Physics at the CMS 20+5'

Session 2 Particle physics overviews Chairman : W. Florkowski Assistant : M. Girard

- 17h55-18h20 M. RIDEL Review of results on Standard Model from the ATLAS experiment 20+5'
18h20-18h45 B. BILIN V+jets production at the CMS 20+5'
18h45-19h10 N. VARELAS Jet physics at CMS 20+5'

Session 3 Heavy ion physics Chairman : H. Reinhardt Assistant : M. Janik

- 17h55-18h15 C.-Y. WONG Collective Forward Momentum Kick to Medium Particles in the Passage of a Jet in a Dense Medium 15+5'
18h15-18h35 S. MRÓWCZYŃSKI Energy loss in unstable quark-gluon-plasma 15+5'
18h35-18h55 L. MALININA Kaon femtoscopy of Pb-Pb and pp collisions at the LHC with the ALICE experiment 15+5'
18h55-19h15 M. JANIK DeltaEta-DeltaPhi angular correlations in pp collisions from ALICE at the LHC 15+5'
19h15-19h35 free

Session 4 Particle physics Chairman and Assistant : A. Mastroserio

- 17h55-18h15 G. G. DA SILVEIRA Exclusive production of W pairs in CMS 15+5'
18h15-18h35 O. NACKENHORST Intrinsic top quark properties - top mass, charge, top and W polarisation and search for FCNC in top decays - at LHC in ATLAS 15+5'
18h35-18h55 R. ZAIDAN Search for the Higgs boson in VH(bb) channel using the ATLAS detector 15+5'
18h55-19h15 D. SCHEIRICH First measurement of associated vector boson plus prompt charmonium production at the ATLAS experiment 15+5'

Session 5 Heavy ion physics (femtoscopy) Chairman : A. Kisiel Assistant : Ł. Graczykowski

- 17h55-18h15 M. SZYMAŃSKI Baryon femtoscopy in heavy-ion collisions at ALICE 15+5'
18h15-18h35 H. ZBROSZCZYK Proton femtoscopy in the STAR experiment 15+5'
18h35-18h55 L. GRACZYKOWSKI Pion femtoscopy measurements in ALICE at the LHC 15+5'
18h55-19h15 K. PONIATOWSKA Prediction of nonidentical particle correlations for the Beam Energy Scan program 15+5'

Tuesday, 3 September 2013, Parallel

Session 1 Heavy ion physics (*heavy flavour, quarkonia*) Chairman and Assistant : A. Mastroserio

- 18h10-18h30 M. NARDI Heavy flavours in nucleus-nucleus collisions at RHIC and LHC 15+5'
- 18h30-18h50 F. NENDZIG Upsilon suppression in PbPb collisions at energies available at the CERN Large Hadron Collider 15+5'
- 18h50-19h10 A. MASTROSERIO J/psi production measurements at midrapidity from pp to Pb-Pb collisions with ALICE 15+5'
- 19h10-19h30 I. DAS Charmonium measurements at forward rapidity in Pb-Pb and p-Pb collisions with ALICE at LHC 15+5'
- 19h30-19h50 P. ROSNET Upsilon production in pp and PbPb collisions with ALICE at LHC 15+5'

Session 2 Particle physics overviews Chairman : G. Anzivino Assistant : J. Crkovska

- 18h10-18h35 M. KAZANA Exotica at the CMS 20+5'
- 18h35-19h00 G. BRONA Forward Physics at the CMS 20+5'
- 19h00-19h25 D. BARBERIS Review of heavy flavour physics results from the ATLAS experiment 20+5'
- 19h25-19h50 S. MEEHAN Review of results on exotic searches from the ATLAS experiment 20+5'

Session 3 Heavy ion physics, QCD theory Chairman : M. Karliner Assistant : M. Janik

- 18h10-18h35 P. MINKOWSKI Oscillatory modes of quarks in baryons for 3 quark flavors u,d,s 20+5'
- 18h35-19h00 W. FLORKOWSKI Testing viscous and anisotropic hydrodynamics in an exactly solvable case 20+5'
- 19h00-19h25 H. REINHARDT The deconfinement phase transition in the Hamiltonian approach 20+5'
- 19h25-19h50 M. PRASZAŁOWICZ Geometrical scaling in high energy collisions and its breaking 20+5'

Session 4 Particle physics Chairman : M. Dobre Assistant : M. Szymański

- 18h10-18h30 J. PINFOLD The MoEDAL Experiment at the LHC
- 18h30-18h50 F. CELSO Overview of the nucleon spin studies at COMPASS
- 18h50-19h10 F. NURUZZAMAN Q-weak: First direct measurement of the weak charge of the proton
- 19h10-19h30 S. DI CHIARA UV Complete Technicolor & Higgs Physics at LHC
- 19h30-19h50 A. LUCCIO A leapfrog based symplectic integrator for the pEDM ring 15+5'

Tuesday, 3 September 2013, Parallel

Session 5 Particle physics (top, Higgs boson) Chairman : K. Assamagan Assistant : Ł. Graczykowski

18h10-18h30 C. BERNARD Differential top quark pair production measurements 15+5'

18h30-18h50 S. PEDRAZA LOPEZ Top quark pair production cross section at LHC in ATLAS 15+5'

18h50-19h10 Ch. RUDOLPH Searches for Rare decays of the Higgs boson with the ATLAS detector 15+5'

19h10-19h30 S. DIGLIO Search for a High mass Higgs using the ATLAS detector 15+5'

Wednesday, 4 September 2013, Parallel

Session 1 Heavy ion physics, particle physics, gravity overviews Chairman and Assistant : Ł. Graczykowski

- 18h10-18h35 S. KUROYANAGI Gravitational waves as probes of the early universe 20+5'
18h35-19h00 P. BARGASSA SUSY at CMS 20+5'
19h00-19h25 L. MARTINI B Physics and Quarkonia at the CMS 20+5'
19h25-19h45 CHEN YU-QI Positronium decay in a circular polarized laser field 15+5'
19h45-20h05 Z. ZINONOS Search for the Higgs boson in $\tau^+\tau^-$ channel using the ATLAS detector 15+5'

Session 2 Particle physics, heavy ion physics Chairman : D. Scheirich Assistant : M. Szymański

- 18h10-18h30 G. ORTONA Search for the SM Higgs boson in the ZZ channel at CMS 15+5'
18h30-18h50 H. YANG Measurement of Properties of the Higgs boson in the diphoton channel using the ATLAS detector 15+5'
18h50-19h10 R. G. PATEL Observation Of A Higgs-Like Boson in the Two Photon Decay Channel 15+5'
19h10-19h30 Y. ALI Charm Quarks as a probe of matter produced in relativistic nucleus-nucleus collisions 15+5'
19h30-19h50 A. GIZHKO Combination and QCD Analysis of Charm Production Cross Section Measurements in Deep-Inelastic ep Scattering at HERA 15+5'

Session 3 QCD Theory Chairman and Assistant :M. Janik

- 18h10-18h30 Ch. SASAKI Yang-Mills thermodynamics: an effective theory approach 15+5'
18h30-18h50 L. TURKO An effective model of QCD thermodynamics 15+5'
18h50-19h15 T. KURTH Lattice QCD Results from the Budapest-Marseille-Wuppertal Collaboration 15+5'
19h10-19h30 G. BARNAFOLDI Non-extensive Statistical Approach for High Energy Collisions 15+5'
19h30-19h50 H. P. PAVEL Unconstrained Hamiltonian formulation of low energy QCD 15+5'

Session 4 Heavy ion, particle physics, quantum optics Chairman : N. Korolkova Assistant : J. Crkovska

- 18h10-18h30 F. KOENIG Artificial event horizons for light
18h30-18h50 K. PIASECKI Subthreshold ϕ meson production in nucleus-nucleus collisions 15+5'
18h50-19h10 A. ORTIZ VELASQUEZ Results on identified particle production in pp, p-Pb and Pb-Pb collisions measured with ALICE at the LHC 15+5'
19h10-19h30 P. W. CATTANEO Limit on the Branching Ratio of the $\mu \rightarrow e$ decay with the MEG experiment at PSI 15+5'
19h30-19h50 G. ANZIVINO Kaons at CERN: recent results and prospects 15+5'

Wednesday, 4 September 2013, Parallel

Session 5 Particle physics, interdisciplinary Chairman : M. Pepe-Altarelli Assistant : M. Girard

18h10-18h30 F. BERTOLUCCI Measurement of diboson production with the ATLAS detector 15+5'

18h30-18h50 C. DAVID New ATLAS results in SUSY searches for 3rd generation squarks and electroweak production 15+5'

18h50-19h10 J. LORENZ New ATLAS results in inclusive searches for supersymmetric squarks and gluinos 15+5'

19h10-19h30 G. ANAGNOSTOU Model Independent Search in 2-Dimensional Mass Space

19h30-19h50 M. MORIKAWA Physics of quantum measurement and its interdisciplinary applications 15+5'

Thursday, 5 September 2013, Parallel

Session 1 Particle and astroparticle physics, gravity, interdisciplinary Chairman : M. Kazana Assistant : Ł. Graczykowski

- 10h50-11h10 G. FANIZZA An exact Jacobi map in Geodetic Light-Cone Gauge 15+5'
- 11h10-11h30 P. JIZBA Special relativity induced by Granular Space 15+5'
- 11h30-11h50 S. RICCIARINI PAMELA mission: Heralding a new era in cosmic ray physics 15+5'
- 11h50-12h10 A. MORSELLI Dark Matter Signals in the gamma-ray sky 15+5'
- 12h10-12h30 S. TUFANLI OPERA Experiment And Recent Results 15+5'
- 12h30-12h50 Z. WANG Highlights from Daya Bay 15+5'
- 12h50-13h10 D. HADLEY Highlights from T2K 15+5'

Session 2 Particle physics, interdisciplinary Chairman : M. V. Marono Assistant : M. Janik

- 10h50-11h10 T. NOBE Real W and Z boson production at HERA 15+5'
- 11h10-11h30 A. ALTHEIMER Searches for $t\bar{t}$ resonances fourth generation vector-like quarks with the ATLAS detector 15+5'
- 11h30-11h50 M. A. SUBIETA VASQUEZ The AEGIS Experiment: measuring the gravitational acceleration of anti-hydrogen 15+5'
- 11h50-12h10 S. STRACKA Spectroscopy of Trapped Atomic Antihydrogen in ALPHA 15+5'
- 12h10-12h30 M. PEPE-ALTARELLI Quarkonia measurements with the LHCb experiment 15+5'
- 12h30-12h50 C. GLASMAN Recent QCD results from ATLAS 15+5'
- 12h50-13h15 O. BRANDT Review of top physics results from the ATLAS experiment 20+5'

Session 3 Particle physics (Higgs boson, top) Chairman : . S. Meehan Assistant : M. Girard

- 10h50-11h10 J. STAHLMAN Measurement of Properties of the Higgs boson in the ZZ to four leptons channel using the ATLAS detector 15+5'
- 11h10-11h30 F. MICHELI Search for the Higgs boson produced in association with top quarks 15+5'
- 11h30-11h50 O. ABOUZEID Measurement of Properties of the Higgs boson in the WW ($l\nu l\nu$) channel using the ATLAS detector 15+5'
- 11h50-12h10 T. CAO Combination of the Higgs Boson Main Properties Measurements using the ATLAS Detector 15+5'
- 12h10-12h30 A. KHANOV Beyond--the--Standard Model Higgs Physics using the ATLAS Experiment 15+5'
- 12h30-12h50 E. BROST Top quark pair properties spin correlations, charge asymmetry and complex final states at LHC in ATLAS 15+5'
- 12h50-13h10 C. FRIEDRICH Single top quark production cross section at LHC in ATLAS 15+5'

Thursday, 5 September 2013, Parallel

Session 4 Particle, gravity, heavy ion physics Chairman : L. Malinina Assistant : M. Szymański

- 10h50-11h10 F. MONTES FAIR physics and the origin of elements 15+5'
- 11h10-11h30 M. LADREM New Indicators of the Finite Volume Transition Point in QCD Deconfinement Phase Transition 15+5'
- 11h30-11h50 A. STAVINSKIY Dense Cold Matter 15+5'
- 11h50-12h10 S. LIM Open heavy flavor measurements in d+Au collisions at PHENIX experiment 15+5'
- 12h30-12h50 S. KABANA Heavy flavour production in the STAR experiment at RHIC 15+5'
- 12h10-12h30 C.S. MONTANARI The ICARUS Experiment: latest results 15+5'
- 12h50-13h10 Y. SHATUNOV Precise measurements of hadron productions in e+e- annihilation in the energy range up to 2 GeV 15+5'

Session 5 Particle physics, cosmology Chairman : J. Lorenz Assistant : J. Crkovska

- 10h50-11h10 M. DOBRE Charm and beauty photoproduction at HERA 15+5'
- 11h10-11h30 M. MARCISOVSKY Measurements of the production of P-wave charmonium states through radiative decays at the ATLAS experiment 15+5'
- 11h30-11h50 N. SAOULIDOU Searches for third generation SUSY from CMS 15+5'
- 11h50-12h10 A. R. DRAGER Inclusive searches for SUSY from CMS 15+5'
- 12h10-12h30 L. GONZALEZ-MESTRES Pre-Big Bang, spinorial space-time, asymptotic Universe 15+5'
- 12h30-12h50 J. ANNIS Overview of the DES experiment at the Blanco Telescope 15+5'
- 12h50-13h10 free