

**International School
"Relativistic Heavy Ion
Collisions, Cosmology and
Dark Matter, Cancer Therapy"**

Monday 15 May 2017 - Friday 26 May 2017

Fysisk institutt

Book of Abstracts

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"Relativistic Hydrodynamics"

Cosmology Session / 60

7 keV sterile neutrino dark matter and its influence on reionization of the Universe

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Presentation type:

85

A new source of Smith-Purcell radiation from the structure controlled by the laser field

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Presentation type:

ALICE hands-on session: experimental data analysis / 26

ALICE Experimental Data Analysis (hands-on session)

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Presentation type:

18

ATLAS Hands-on Session: Searching for exotic particles in pp collisions at 8 TeV using ATLAS open data and tools. Room FØ393.

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Hands-on ATLAS session with Introductory Lecture
the preliminary date is 20.05.2017 (Saturday) the whole day
Lecturer Dr. Magnar Bugge (University of Oslo) Searching for exotic particles in pp collisions at 8 TeV using ATLAS open data and tools (Hands-on session)
It needs preparation for students in advance : installations of Python + ROOT + downloads Atlas open data files

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Anisotropic Flow In Heavy Ion Collisions

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Anisotropic Flow and Quark Gluon Plasma

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Anisotropic flow fluctuations in hydro-inspired freeze-out models

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Application of light-by-light sum rules to the charmonium system

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46

Astrophysics and Cosmology - experimental overview

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Astrophysics and Cosmology - theory overview

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Bayesian analysis of hybrid EoS models using mass and radius data of compact stars

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Presentation type:

72

Beyond Van der Waals equation of state of hadronic matter

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Presentation type:

52

Chiral symmetry restoration

27

Coherent phenomena in diagnostics of charged particles and beams Part I

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Presentation type:

102

Coherent phenomena in diagnostics of charged particles and beams Part II

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68

Cosmology of Early Universe-II

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Cosmology Session / 5

Cosmology of Early Universe: Magnetic Fields Generation

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Cosmology Session / 49

Cosmology session

Presentation type:

86

Critical phenomena in superconductors: dendritic flux instabilities against Bean critical state

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Presentation type:

96

Delta resonances and charged rho-meson condensate in neutron stars

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Dilepton and Photon Production in Heavy Ion Collisions

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Discovery Statistics

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Equation of State and kinetic properties of nucleon gas from UrQMD transport model in the box

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Cosmology Session / 74

Equation of State of neutron stars, consistent with heavy ion collision data

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Presentation type:

66

Even-by-Event Fluctuations in nucleus-nucleus collisions

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Presentation type:

13

Experimental Searches for Dark Matter

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Femtoscropy of Heavy Ion Collisions

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Fluctuations and Correlations

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Future accelerator facilities

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Gravity as a theory of pure connection

Presentation type:

Workshop "Nuclear, Particle physics and Cosmology" on the DFDS Boat / 82

HYDJET++ and Anisotropic flow fluctuations in Pb+Pb collisions at LHC

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Presentation type:

ALICE hands-on session: experimental data analysis / 106

Hands on session 1: Event properties

ALICE hands-on session: experimental data analysis / 108

Hands on session 2: Particle tracking and identification

ALICE hands-on session: experimental data analysis / 111

Hands on session 3: Constructing two-particle correlation function

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ALICE hands-on session: experimental data analysis / 112

Hands on session 4: Constructing event plane, u- and Q-vectors

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ALICE hands-on session: experimental data analysis / 114

Hands on session 5: J/Psi yield Extraction

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Heavy Quarkonia in Heavy Ion Collisions

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Heavy baryon spectroscopy using the Ritz variational approach

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Presentation type:

81

Heavy baryon spectroscopy using the Ritz variational approach part 2

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1

High Energy Density Physics in Relativistic Heavy Ion Collisions

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High Energy Physics in LHC Era

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High energy particle physics - experimental overview

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High energy particle physics - theory overview

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ALICE hands-on session: experimental data analysis / 115

Homework assignments

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Indirect Searches for Dark Matter

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Cosmology Session / 67

Introduction to Cosmology of Early Universe - II

Presentation type:

Cosmology Session / 3

Introduction to Cosmology of Early Universe I

Presentation type:

Cosmology Session / 12

Introduction to Dark Matter

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ALICE hands-on session: experimental data analysis / 113

Introduction to J/Psi analysis

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Introduction to Supersymmetry

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ALICE hands-on session: experimental data analysis / 110

Introduction to anisotropic flow observables and how to measure them in ALICE

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ALICE hands-on session: experimental data analysis / 109

Introduction to correlation analyses

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Introduction to superconductivity

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ALICE hands-on session: experimental data analysis / 105

Introduction: ALICE experiment and event properties

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ALICE hands-on session: experimental data analysis / 107

Introduction: particle reconstruction and identification

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Poster session / 117

Investigation of Different Materials with Positron Annihilation Lifetime Spectroscopy

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21

Jet Quenching and Substructure Modifications in Heavy-Ion Collisions

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Lattice QCD

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Presentation type:

100

Lattice QCD and hadron resonance gas equation of state

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Poster session / 118

Magnetic structure of light mesons in lattice QCD

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78

Magnetization and magnetic susceptibility of topological insulators

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104

Modeling ion-beam cancer therapy on macro and micro scales

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Modeling ion-beam cancer therapy on macro and micro scales

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Cosmology Session / 25

Nuclear Reaction Rates in Stars

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Nuclear fragmentation reactions: from basic research to medical applications

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98

Observability of $K^*(892)$ and $\phi(1020)$ resonances within iHKM as a probe of hadronic medium in heavy ion collisions

Presentation type:

32

Onset of Hydrodynamics in Heavy Ion-Collisions

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Poster session / 76

Open charm simulation in p-Ni collisions at SIS-100 with CBM detector

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Cosmology Session / 101

POSTER SESSION with wine tasting

10

Particle production in Heavy Ion Collisions

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Parton Model, Jet Physics and Jet Quenching

Poster session / 116

Phase diagram in entanglement PNJL model

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7

Phase transitions in dynamical environments

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Cosmology Session / 4

Physics of Black Holes

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Cosmology Session / 50

Properties of nuclear matter in supernova explosions

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11

Prospects for baryon rich matter research at NICA

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Poster session / 94

QA of the Pb+Pb data collected by the NA61/SHINE at CERN

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Quantum corrections to spectra and correlations for nucleus-nucleus collisions in the hydrodynamic model

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83

RHIC Experimental overview

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44

Relativistic heavy ion collisions - experimental overview

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Relativistic heavy ion collisions - theory overview

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Search for the Cherm-Simons vector boson at the collider

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Cosmology Session / 89

Self-interacting dark matter

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Space-time picture of the ultra-relativistic heavy-ion collisions

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Strangeness Production

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35

Strangeness Production in Heavy Ion Collisions

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Poster session / 119

Structure of X(3872) from lattice QCD

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Presentation type:

14

Superconductivity and its applications

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Thermalisation after holographic bilocal quench

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Presentation type:

84

Transverse momentum dependence of kaon Bose-Einstein correlations in $p+p$ collisions at $\sqrt{s} = 200$ and 510 GeV with STAR

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73

Van der Waals interactions in hadron resonance gas: from nuclear matter to Lattice QCD

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Visualisation of magnetic flux in high-quality YBCO films synthesized by cost-effective environmental-friendly techniques

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69

Welcome at UiO!

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87

global lambda polarization in high energy collisions

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Presentation type: