

Faggruppemøte for subatomær fysikk og astrofysikk

Wednesday 26 September 2012 - Friday 28 September 2012

Universitetet i Bergen



Book of Abstracts

Contents

The Oslo Method and its fruits	1
Search for susy with tau leptons at ATLAS	1
Welcome	1
Medical Physics meets Nuclear Physics . Radiation therapy with photons, protons and heavy ions	1
The Oslo method: Nuclear decay properties at low excitation energies	1
Supernova shock waves	1
Exploring the SUSY parameter space with MultiNest	1
Investigation of the properties in the quasi--continuum of the nuclei 107Pd and 108Pd . .	2
Local containment corrections in the CMS ECAL	2
First experimental campaign of γ -ray strength function measurements with LaBr ₃ (Ce) detectors at the Oslo Cyclotron Laboratory	2
Search for scalar top quark using BDT	2
Dirac equation in curved spacetime	2
D0-electron correlation using the ALICE detector	2
The High-Level Trigger of the ALICE Experiment at CERN - An Overview	3
Chiral phase transition in finite temperature and densities for three flavour QCD	3
Indirect detection of dark matter annihilations	3
Bs \rightarrow mu+mu- in ATLAS	3
Antideuterons as a Dark Matter signature	3
Anisotropic flow in relativistic heavy ion collisions at RHIC and LHC	3
Investigation of the properties in the quasi--continuum of the nuclei 107Pd and 108Pd . .	3
Mammoths, Meteors, Supernovae and Nuclear Archaeology	4
Observation of the exclusive decays Bs \rightarrow JpsiPhi and Bd \rightarrow JpsiKstar in the ATLAS detector using 4.98 fb of proton-proton collisions data at 7 TeV	4

Inger Eli Ruud	4
Looking for light from dark matter	4
Study of the γ -ray strength in ^{238}Np	4
Lifetimes of excited states in neutron-rich nuclei	4

Session 1 / 4

The Oslo Method and its fruits

Corresponding Author: therese.renstrom@fys.uio.no

Session 1 / 5

Search for susy with tau leptons at ATLAS

Corresponding Author: orjan.dale@cern.ch

Session 1 / 6

Welcome

Corresponding Authors: haavard.helstrup@cern.ch, haavard.helstrup@ift.uib.no

Session 1 / 7

Medical Physics meets Nuclear Physics . Radiation therapy with photons, protons and heavy ions

Corresponding Author: camilla.hanquist.stokkevag@cern.ch

Session 2 / 8

The Oslo method: Nuclear decay properties at low excitation energies

Corresponding Author: h.t.nyhus@fys.uio.no

Session 2 / 9

Supernova shock waves

Corresponding Author: haakoan@stud.ntnu.no

Session 2 / 10

Exploring the SUSY parameter space with MultiNest

Corresponding Author: anders.kvellestad@nordita.org

11

Investigation of the properties in the quasi--continuum of the nuclei ^{107}Pd and ^{108}Pd

Corresponding Author: t.k.eriksen@fys.uio.no

Session 3 / 12

Local containment corrections in the CMS ECAL

Corresponding Author: steffen.maeland@cern.ch

Session 3 / 13

First experimental campaign of γ -ray strength function measurements with LaBr₃(Ce) detectors at the Oslo Cyclotron Laboratory

Corresponding Author: francesca.giacoppo@cern.ch

Session 4 / 14

Search for scalar top quark using BDT

Corresponding Author: agnethe.olsen@cern.ch

Session 4 / 15

Dirac equation in curved spacetime

Corresponding Author: dagmorsj@stud.ntnu.no

Session 4 / 16

D0-electron correlation using the ALICE detector

Corresponding Author: hege.austrheim.erdal@cern.ch

Session 5 / 17

The High-Level Trigger of the ALICE Experiment at CERN - An Overview

Corresponding Author: dinesh.ram@cern.ch

Session 5 / 18

Chiral phase transition in finite temperature and densities for three flavour QCD

Corresponding Author: glesaaen@stud.ntnu.no

Session 5 / 19

Indirect detection of dark matter annihilations

Corresponding Author: larseis@stud.ntnu.no

Session 5 / 20

Bs->mu+mu- in ATLAS

Corresponding Author: maren.ugland@cern.ch

Session 6 / 21

Antideuterons as a Dark Matter signature

Corresponding Author: l.a.dal@fys.uio.no

Session 6 / 22

Anisotropic flow in relativistic heavy ion collisions at RHIC and LHC

Corresponding Author: bhjohan@student.uio.no

Session 6 / 23

Investigation of the properties in the quasi--continuum of the nuclei ^{107}Pd and ^{108}Pd

Corresponding Author: t.k.eriksen@fys.uio.no

Session 7 / 24

Mammoths, Meteors, Supernovae and Nuclear Archaeology

Corresponding Author: rbfirstone@lbl.gov

Session 7 / 25

Observation of the exclusive decays $\text{Bs} \rightarrow \text{JpsiPhi}$ and $\text{Bd} \rightarrow \text{JpsiKstar}$ in the ATLAS detector using 4.98 fb of proton-proton collisions data at 7 TeV

Corresponding Author: justas.zalieckas@cern.ch

Session 7 / 26

Inger Eli Ruud

Corresponding Author: ingerru@fys.uio.no

Session 8 / 27

Looking for light from dark matter

Corresponding Authors: trygve.buanes@ift.uib.no, trygve.buanes@cern.ch

Session 8 / 28

Study of the γ -ray strength in ^{238}Np

Corresponding Author: tornyitom@gmail.com

Session 8 / 29

Lifetimes of excited states in neutron-rich nuclei

Corresponding Author: t.w.hagen@fys.uio.no