

Questioning Fundamental Physical Principles



Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome

Tuesday, May 6, 2014 9:00 AM (5 minutes)

Presenter: Prof. MAVROMATOS, Nikos (University of London (GB))

Session Classification: Opening

Contribution ID: 1

Type: **not specified**

Latest on Supersymmetry, Higgs and LHC Physics

Tuesday, May 6, 2014 9:05 AM (30 minutes)

Presenter: ELLIS, Jonathan R. (CERN)

Session Classification: Session I

Contribution ID: 2

Type: **not specified**

Discrete Symmetries T, CP and CPT

Tuesday, May 6, 2014 9:35 AM (30 minutes)

Presenter: BERNABEU, Jose (Universidad de Valencia)

Session Classification: Session I

Contribution ID: 3

Type: **not specified**

CPT and neutrinos

Tuesday, May 6, 2014 10:05 AM (30 minutes)

Presenter: BARENBOIM, Gabriela

Session Classification: Session I

Contribution ID: 4

Type: **not specified**

Experimental status of Supersymmetry

Friday, May 9, 2014 12:10 PM (30 minutes)

Presenter: Dr MITSOU, Vasiliki (IFIC Valencia (ES))

Session Classification: Session XIV

Contribution ID: 5

Type: **not specified**

Experimental prospects for T and CPT symmetries tests in the B meson system

Tuesday, May 6, 2014 11:00 AM (30 minutes)

Presenter: BEVAN, Adrian (University of London (GB))

Session Classification: Session II

Contribution ID: 6

Type: **not specified**

Testing fundamental physical principles with entangled neutral K mesons

Tuesday, May 6, 2014 11:30 AM (30 minutes)

Presenter: DI DOMENICO, Antonio (Universita e INFN, Roma I (IT))

Session Classification: Session II

Contribution ID: 7

Type: **not specified**

Fundamental Physics results at LHCb and future perspectives

Tuesday, May 6, 2014 12:00 PM (30 minutes)

Presenter: PASSALEVA, Giovanni (INFN Florence (IT))

Session Classification: Session II

Contribution ID: 8

Type: **not specified**

On Lorentz violation and the origin of Gravity

Tuesday, May 6, 2014 2:30 PM (30 minutes)

Presenter: KIRITSIS, Elias (Unknown)

Session Classification: Session III

Contribution ID: 9

Type: **not specified**

Test of CPT and Lorentz symmetry with entangled K_0 's

Tuesday, May 6, 2014 3:00 PM (30 minutes)

Presenter: Dr DE SANTIS, Antonio (U. di Roma "La Sapienza")

Session Classification: Session III

Contribution ID: **10**

Type: **not specified**

Time-dependent CP violation and stability of the entangled $B B\bar{B}$ state at Belle

Tuesday, May 6, 2014 12:30 PM (30 minutes)

Presenter: SCHWANDA, Christoph (Austrian Academy of Sciences)

Session Classification: Session II

Contribution ID: 11

Type: **not specified**

Physics with entangled neutral D mesons at BES-III and future perspectives

Tuesday, May 6, 2014 4:30 PM (30 minutes)

Presenter: Dr LU, Xiaorui

Session Classification: Session IV

Contribution ID: 12

Type: **not specified**

Photon-photon scattering and the nature of QED vacuum: experimental approaches

Thursday, May 8, 2014 5:30 PM (30 minutes)

Presenter: Prof. MILOTTI, Edoardo

Session Classification: Session XII

Contribution ID: 13

Type: **not specified**

The possible existence of a Time Operator and its possible refutal in meson experiments

Tuesday, May 6, 2014 5:30 PM (30 minutes)

Presenter: Prof. DURT, Thomas

Session Classification: Session IV

Contribution ID: 14

Type: **not specified**

Inflation & Supersymmetry

Wednesday, May 7, 2014 9:00 AM (30 minutes)

Presenter: OLIVE, Keith Alison (University of Minnesota (US))

Session Classification: Session V

Contribution ID: 15

Type: **not specified**

Higgs inflation at the critical point

Wednesday, May 7, 2014 9:30 AM (30 minutes)

Presenter: SHAPOSHNIKOV, Mikhail (EPFL)

Session Classification: Session V

Contribution ID: 16

Type: **not specified**

Testing Baryogenesis at the LHC

Wednesday, May 7, 2014 10:00 AM (30 minutes)

Presenter: MOHAPATRA, Rabindra (University of Maryland)

Session Classification: Session V

Contribution ID: 17

Type: **not specified**

Neutrinos and Leptogenesis in Early Universe

Wednesday, May 7, 2014 11:00 AM (30 minutes)

Presenter: PASCOLI, Silvia (University of Durham (GB))

Session Classification: Session VI

Contribution ID: **18**

Type: **not specified**

Flavour and Thermal Effects on Leptogenesis

Wednesday, May 7, 2014 11:30 AM (30 minutes)

Presenter: PILAFTSIS, Apostolos (University of Manchester)

Session Classification: Session VI

Contribution ID: 19

Type: **not specified**

Vacuum Energy and Λ : a new perspective

Wednesday, May 7, 2014 12:00 PM (30 minutes)

Presenter: DADHICH, Naresh

Session Classification: Session VI

Contribution ID: 21

Type: **not specified**

Strings, and CPT Violating Baryon Asymmetry in the Universe

Wednesday, May 7, 2014 12:30 PM (30 minutes)

Presenter: SARKAR, Sarben (King's College London)

Session Classification: Session VI

Contribution ID: 22

Type: **not specified**

CPTV leptogenesis

Wednesday, May 7, 2014 3:10 PM (30 minutes)

Presenter: MUKHOPADHYAYA, Banibrata

Session Classification: Session VII

Contribution ID: 23

Type: **not specified**

flavor neutrino states and quantum entanglement

Wednesday, May 7, 2014 3:40 PM (30 minutes)

Presenter: BLASONE, M.

Session Classification: Session VII

Contribution ID: 24

Type: **not specified**

Questioning causality, unitarity and CPT in curved spacetime QFT

Friday, May 9, 2014 9:00 AM (30 minutes)

Presenter: SHORE, Graham Martin (Swansea University (GB))

Session Classification: Session XIII

Contribution ID: 25

Type: **not specified**

The Continuing Quest for the Magnetic Monopole

Friday, May 9, 2014 9:30 AM (30 minutes)

Presenter: PINFOLD, James (University of Alberta (CA))

Session Classification: Session XIII

Contribution ID: 26

Type: **not specified**

Lorentz breaking effective field theories: phenomenology and constraints

Friday, May 9, 2014 10:00 AM (40 minutes)

Presenter: LIBERATI, Stefano

Session Classification: Session XIII

Contribution ID: 27

Type: **not specified**

Probing the space-time structure: the holometer experiment at Fermilab

Thursday, May 8, 2014 9:30 AM (45 minutes)

Presenter: HOGAN, Craig

Session Classification: Session IX

Contribution ID: 28

Type: **not specified**

The most preicise tests of the standard model and its symmetries

Thursday, May 8, 2014 2:45 PM (45 minutes)

Presenter: GABRIELSE, Gerald (Harvard University (US))

Session Classification: Session XI

Contribution ID: 29

Type: **not specified**

Hyperfine structure of antihydrogen in ASCUSA

Thursday, May 8, 2014 11:15 AM (30 minutes)

Presenter: WIDMANN, Eberhard (Austrian Academy of Sciences (AT))

Session Classification: Session X

Contribution ID: 30

Type: **not specified**

Physics of ASACUSA: the spectroscopy of antiprotonic helium

Thursday, May 8, 2014 11:45 AM (30 minutes)

Presenter: Prof. HAYANO, Ryugo (University of Tokyo (JP))

Session Classification: Session X

Contribution ID: 31

Type: **not specified**

Antihydrogen physics with ALPHA

Thursday, May 8, 2014 12:15 PM (30 minutes)

Presenter: CHARLTON, Michael (Swansea University)

Session Classification: Session X

Contribution ID: 32

Type: **not specified**

VIP-2 at Gran Sasso - an experiment to test the Pauli Principle for electrons

Wednesday, May 7, 2014 6:05 PM (30 minutes)

Presenter: MARTON, Johann (Oesterreichische Akademie der Wissenschaften)

Session Classification: Session VIII

Contribution ID: 33

Type: **not specified**

The ELENA project at CERN

Thursday, May 8, 2014 12:45 PM (30 minutes)

Presenter: OELERT, Walter (Johannes-Gutenberg-Universitaet Mainz (DE))

Session Classification: Session X

Contribution ID: 34

Type: **not specified**

Overview of Physics results at CMS

Thursday, May 8, 2014 3:30 PM (30 minutes)

Presenter: CLERBAUX, Barbara (Inter-University Institute for High Energies (BE))

Session Classification: Session XI

Contribution ID: 35

Type: **not specified**

Overview of Physics results at ATLAS

Thursday, May 8, 2014 4:00 PM (30 minutes)

Presenter: Prof. LUBATTI, Henry (University of Washington (US))

Session Classification: Session XI

Contribution ID: 36

Type: **not specified**

on dark photon searches

Thursday, May 8, 2014 5:00 PM (30 minutes)

Presenter: KUPSC, Andrzej

Session Classification: Session XII

Contribution ID: 37

Type: **not specified**

Prospects for studies of discrete symmetries with positronium

Tuesday, May 6, 2014 3:30 PM (30 minutes)

Presenter: MOSKAL, Pawel (Jagiellonian University)

Session Classification: Session III

Contribution ID: 38

Type: **not specified**

Tests of fundamental principles

Friday, May 9, 2014 11:10 AM (30 minutes)

Presenter: LAEMMERZAHN, C.

Session Classification: Session XIV

Contribution ID: 40

Type: **not specified**

Recent developments in Collapse Models

Wednesday, May 7, 2014 4:10 PM (30 minutes)

Presenter: BASSI, Angelo

Session Classification: Session VII

Contribution ID: 41

Type: **not specified**

CP violation and quantum entanglement and possible spontaneous collapses of the wave function

Wednesday, May 7, 2014 5:05 PM (30 minutes)

Presenter: HIESMAYR, Beatrix (University of Vienna)

Session Classification: Session VIII

Contribution ID: 42

Type: **not specified**

X-ray experiments to test collapse models

Wednesday, May 7, 2014 5:35 PM (30 minutes)

Presenter: CURCEANU, Catalina (LNF-INFN)

Session Classification: Session VIII

Contribution ID: 43

Type: **not specified**

Improving interferometers by quantum light: is possible testing quantum gravity on an Optical bench?

Thursday, May 8, 2014 10:15 AM (30 minutes)

Presenter: GENOVESE, Marco (Universita degli Studi di Torino)

Session Classification: Session IX

Contribution ID: 44

Type: **not specified**

Boson Sampling via integrated quantum photonics

Thursday, May 8, 2014 9:00 AM (30 minutes)

Presenter: SCIARRINO, Fabio

Session Classification: Session IX

Contribution ID: 46

Type: **not specified**

Some general results on CP and CPT violating parameters determined from $C=-1$ and $C=+1$ entangled states

Tuesday, May 6, 2014 5:00 PM (30 minutes)

Presenter: Prof. SHI, Yu

Session Classification: Session IV

Contribution ID: 47

Type: **not specified**

The AEGIS experiment at the CERN antiproton decelerator

Friday, May 9, 2014 11:40 AM (30 minutes)

Presenter: DOSER, Michael (CERN)

Session Classification: Session XIV

Contribution ID: 49

Type: **not specified**

50 years of CP violation

Friday, May 9, 2014 12:40 PM (20 minutes)

Presenter: STEINBERGER, Jack (Sezione di Pisa (IT))

Session Classification: Closing: 50 years of CP Violation