

PHYSICS IN COLLISION 2013

Tuesday 03 September 2013 - Saturday 07 September 2013

IHEP, Beijing

Book of Abstracts

Contents

Top, W and Z	1
t-tbar, single t and associate t production	1
Measurements of t quark properties	1
Boson pair production	1
Forward physics and soft QCD results	1
Jet physics	1
Structure function measurements and precision tests of QCD	1
Applications of Higher Order QCD	1
Spin structure functions	1
Recent results from Lattice QCD	2
Reactor-based neutrino exps.	2
Appearance neutrino oscillation experiments	2
Neutrino related parameters from cosmology experiments	2
Neutrino astrophysics	2
Low energy neutrinos	2
Double-beta decay	2
Bosonic Higgs decays	2
Fermionic Higgs decays	2
Searches for non-SM Higgs bosons	3
Higgs quantum numbers couplings	3
Summary of the prospects of Higgs boson scenario beyond the SM	3
Poster presentations	3
Hard probes from RHIC to LHC energies	3
Collective effect	3

B and Bs decays	3
CPV and CKM angles in B+, B0, Bs	3
Bottom production, spectroscopy, lifetime	3
D0 mixing, CPV and D decays	4
Charmonium and light hadron spectroscopy	4
Exotic hadrons and Quarkonium	4
CKM summary	4
LFV (including tau LFV from B-factories and LHC	4
Kaon physics	4
Supersymmetry searches	4
The 3rd generation superpartners	4
Searches for exotic phenomena	5
Dark Matter Searches	5
Particle Astrophysics	5
Summary/”inspirational” talk	5
Next PIC	5
Next PIC	5
Performance and operation experience of the Atlas Semiconductor Tracker	5
The ATLAS Tile Calorimeter Performance at LHC	5
The CMS High Level Trigger	5
MRPC detector for the upgrade of BESIII E-TOF	6
The recent status and prospect of CDEX experiment and China Jinping underground laboratory	6
The Double Chooz Experiment	6
Overview of the Jiangmen Underground Neutrino Observatory (JUNO)	6
Highest energy astroparticle physics with the Pierre Auger Observatory	6
Search for Muon to Electron Conversion at J-PARC - COMET Experiment	6
Search for the Higgs Boson decaying into tau pairs	6
Test of QCD at large Q^2 with exclusive hadronic processes	6
Strong phase in $D^0 \rightarrow K\pi$ decay at BESIII	7

Closing	7
poster-from Dengjie LI	7
Partial wave analysis at BESIII	7
Kaons at CERN: recent results and prospects	7
Observation of X(3872) at BESIII	7
A new inner drift chamber for BESIII	7
Observation of the X(1840) at BESIII	7
Energy Non-Linearity Model of the Daya Bay Antineutrino Detector	7
Backgrounds in the Measurement of θ_{13} with Hydrogen Neutron Capture at Daya Bay	8

EW / 3

Top, W and Z

Corresponding Author(s): yinh@mail.ccnu.edu.cn

EW / 4

t-tbar, single t and associate t production

Corresponding Author(s): schwer@pa.msu.edu

EW / 5

Measurements of t quark properties

EW / 6

Boson pair production

Corresponding Author(s): jian.wang@cern.ch

QCD / 7

Forward physics and soft QCD results

Corresponding Author(s): livio.fano@pg.infn.it

QCD / 8

Jet physics

Corresponding Author(s): yanwen@ustc.edu.cn

QCD / 9

Structure function measurements and precision tests of QCD

Corresponding Author(s): isa@mpp.mpg.de

QCD / 10

Applications of Higher Order QCD

Corresponding Author(s): shoeche@slac.stanford.edu

QCD / 11

Spin structure functions

QCD / 12

Recent results from Lattice QCD

Corresponding Author(s): liuchuan@pku.edu.cn

Neutrino physics / 13

Reactor-based neutrino exps.

Corresponding Author(s): jjling@bnl.gov

Neutrino physics / 14

Appearance neutrino oscillation experiments

Corresponding Author(s): vittorio.palladino@na.infn.it

Neutrino physics / 15

Neutrino related parameters from cosmology experiments

Corresponding Author(s): hou@ucdavis.edu

Neutrino physics / 16

Neutrino astrophysics

Corresponding Author(s): joanna.kiryluk@stonybrook.edu

Neutrino physics / 17

Low energy neutrinos

Corresponding Author(s): giacchino.ranucci@mi.infn.it

Neutrino physics / 18

Double-beta decay

Corresponding Author(s): alberto.garfagnini@pd.infn.it

Higgs searches / 19

Bosonic Higgs decays

Higgs searches / 20

Fermionic Higgs decays

Corresponding Author(s): romain.madar@cern.ch

Higgs searches / 21

Searches for non-SM Higgs bosons

Corresponding Author(s): rainer.mankel@desy.de

Higgs searches / 22

Higgs quantum numbers couplings

Corresponding Author(s): e.pianori@warwick.ac.uk

Higgs searches / 24

Summary of the prospects of Higgs boson scenario beyond the SM

Corresponding Author(s): oscar.stal@fysik.su.se

Posters / 25

Poster presentations

Heavy ion physics / 26

Hard probes from RHIC to LHC energies

Corresponding Author(s): michael.p.mccumber@gmail.com

Heavy ion physics / 27

Collective effect

Heavy flavor I / 28

B and Bs decays

Corresponding Author(s): bozzi@fe.infn.it

Heavy flavor I / 29

CPV and CKM angles in B^+ , B^0 , B_s

Corresponding Author(s): monteil@in2p3.fr

Heavy flavor I / 30

Bottom production, spectroscopy, lifetime

Corresponding Author(s): he-jb02@mails.tsinghua.edu.cn

Heavy flavor II / 31

D⁰ mixing, CPV and D decays

Corresponding Author(s): sergey.barsuk@cern.ch

Heavy flavor II / 32

Charmonium and light hadron spectroscopy

Corresponding Author(s): shencp@ihep.ac.cn

Heavy flavor II / 33

Exotic hadrons and Quarkonium

Corresponding Author(s): schoi@gsnu.ac.kr

Heavy flavor II / 34

CKM summary

Heavy flavor II / 35

LFV (including tau LFV from B-factories and LHC)

Corresponding Author(s): mori@icepp.s.u-tokyo.ac.jp

Heavy flavor II / 36

Kaon physics

Corresponding Author(s): nomurat@post.kek.jp

Searches, Dark Matter, Exotic phenomena / 37

Supersymmetry searches

Corresponding Author(s): maurizio.pierini@cern.ch

Searches, Dark Matter, Exotic phenomena / 38

The 3rd generation superpartners

Corresponding Author(s): ximo.poveda@cern.ch

Searches, Dark Matter, Exotic phenomena / 39

Searches for exotic phenomena

Corresponding Author(s): kmblack@physics.bu.edu

Searches, Dark Matter, Exotic phenomena / 40

Dark Matter Searches

41

Particle Astrophysics

42

Summary/"inspirational" talk

43

Next PIC

Searches, Dark Matter, Exotic phenomena / 46

Next PIC

Posters / 47

Performance and operation experience of the Atlas Semiconductor Tracker

Corresponding Author(s): zhijun.liang@cern.ch

Posters / 48

The ATLAS Tile Calorimeter Performance at LHC

Corresponding Author(s): simon.molander@fysik.su.se

Posters / 49

The CMS High Level Trigger

Corresponding Author(s): valentina.gori@cern.ch

Posters / 50

MRPC detector for the upgrade of BESIII E-TOF

Corresponding Author(s): yrx1989@mail.ustc.edu.cn

Posters / 51

The recent status and prospect of CDEX experiment and China Jinping underground laboratory

Posters / 52

The Double Chooz Experiment

Corresponding Author(s): gyang9@hawk.iit.edu

Posters / 53

Overview of the Jiangmen Underground Neutrino Observatory (JUNO)

Corresponding Author(s): liyufeng@ihep.ac.cn

Posters / 54

Highest energy astroparticle physics with the Pierre Auger Observatory

Corresponding Author(s): mariazzi@fisica.unlp.edu.ar

Poster II / 55

Search for Muon to Electron Conversion at J-PARC - COMET Experiment

Corresponding Author(s): yuany@ihep.ac.cn

Poster II / 56

Search for the Higgs Boson decaying into tau pairs

Corresponding Author(s): jakob.salfeld@cern.ch

Poster II / 57

Test of QCD at large Q^2 with exclusive hadronic processes

Corresponding Author(s): shencp@ihep.ac.cn

Poster II / 58

Strong phase in $D^0 \rightarrow K\pi$ decay at BESIII

Corresponding Author(s): zhouxk@ustc.edu.cn

Searches, Dark Matter, Exotic phenomena / 59

Closing

60

poster-from Dengjie LI

Corresponding Author(s): wensp@ihep.ac.cn

61

Partial wave analysis at BESIII

62

Kaons at CERN: recent results and prospects

63

Observation of $X(3872)$ at BESIII

64

A new inner drift chamber for BESIII

65

Observation of the $X(1840)$ at BESIII

66

Energy Non-Linearity Model of the Daya Bay Antineutrino Detector

67

Backgrounds in the Measurement of θ_{13} with Hydrogen Neutron Capture at Daya Bay