

**The 13th International  
Workshop on Tau Lepton  
Physics (TAU2014)**

**Report of Contributions**

Contribution ID: 0

Type: **not specified**

# Welcome

*Monday 15 September 2014 09:00 (10 minutes)*

**Presenter:** STAHL, Achim (Rheinisch-Westfaelische Tech. Hoch. (DE))

**Session Classification:** Opening

Contribution ID: 1

Type: **not specified**

## Opening Address

*Monday 15 September 2014 09:10 (20 minutes)*

**Presenter:** Dr SCHMEE, Margrethe

**Session Classification:** Opening

Contribution ID: 2

Type: **not specified**

## **Brief Introductions/Organization**

*Monday 15 September 2014 09:30 (10 minutes)*

**Presenter:** NUGENT, Ian Michael (RWTH-Aachen)

**Session Classification:** Opening

Contribution ID: 3

Type: **not specified**

## Overview of Tau Physics Intro: Theory/Experiment

*Monday 15 September 2014 09:40 (40 minutes)*

**Presenters:** GONZALEZ-ALONSO, Martin (Universidad de Valencia); GONZALEZ-ALONSO, Martin

**Session Classification:** Tau Properties I

Contribution ID: 4

Type: **not specified**

## **Michel Parameter of the Tau Lepton (Belle)**

*Monday 15 September 2014 10:20 (20 minutes)*

**Presenters:** EPIFANOV, Denis; EPIFANOV, Denis (U)

**Session Classification:** Tau Properties I

Contribution ID: 5

Type: **not specified**

## **Radiative Decays (BaBar)**

*Monday 15 September 2014 10:40 (20 minutes)*

**Presenter:** Mr OBERHOF, Benjamin (INFN SEZIONE DI PISA)

**Session Classification:** Tau Properties I

Contribution ID: 6

Type: **not specified**

## **Tau Mass (BES III)**

**Presenter:** LUO, TAO (U)



Contribution ID: 7

Type: **not specified**

## **The Electric Dipole Moment of the Tau (Belle)**

*Monday 15 September 2014 11:30 (20 minutes)*

**Presenter:** INAMI, Kenji (Nagoya university)

**Session Classification:** Tau Properties II

Contribution ID: **8**

Type: **not specified**

## **Tau EDM (BaBar)**

Contribution ID: 9

Type: **not specified**

## The lifetime of the tau lepton (Belle)

*Monday 15 September 2014 14:20 (25 minutes)*

**Presenters:** SHAPKIN, Mikhail (IHEP); SHAPKIN, Mikhail (Institute for High Energy Physics (RU))

**Session Classification:** Tau Properties III/Electro-Weak

Contribution ID: **10**

Type: **not specified**

## **Tau Lifetime (BELLE)**

Contribution ID: 11

Type: **not specified**

## **Tau Mass (BES III)**

*Monday 15 September 2014 14:00 (20 minutes)*

**Presenter:** LUO, TAO (U)

**Session Classification:** Tau Properties III/Electro-Weak

Contribution ID: 12

Type: **not specified**

## HFAG Report with Theory Introduction for Vus

*Monday 15 September 2014 14:45 (20 minutes)*

**Presenter:** LUSIANI, Alberto (Scuola Normale Superiore and INFN Pisa)

**Session Classification:** Tau Properties III/Electro-Weak

Contribution ID: 13

Type: **not specified**

## **Tau->3pipi0nu (BELLE)**

*Monday 15 September 2014 12:10 (20 minutes)*

**Presenter:** Mr HAYASHII, Hisaki (nara women's university)

**Session Classification:** Tau Properties II

Contribution ID: 14

Type: **not specified**

## **Radiative corrections to di-pion tau decays**

*Tuesday 16 September 2014 09:30 (20 minutes)*

**Presenter:** LOPEZ CASTRO, Gabriel (Cinvestav-IPN)

**Session Classification:** QCD I



Contribution ID: 15

Type: **not specified**

## **Tau-data-based inverse moment finite energy sum-rule input to the combined continuum-lattice determination of $L_{10}$**

*Tuesday 16 September 2014 16:30 (20 minutes)*

**Presenter:** Prof. GOLTERMAN, Maarten (San Francisco State University)

**Session Classification:** QCD IV

Contribution ID: 16

Type: **not specified**

## **Study of an anomalous tau lepton decay using a chiral Lagrangian with vector mesons**

*Tuesday 16 September 2014 09:50 (20 minutes)*

**Presenter:** Prof. MOROZUMI, Takuya (Hiroshima University)

**Session Classification:** QCD I

Contribution ID: 17

Type: **not specified**

**TBA**

Contribution ID: **18**

Type: **not specified**

**TBA**

Contribution ID: **19**

Type: **not specified**

## **QCD/g-2 Intro: Theory**

*Tuesday 16 September 2014 09:00 (30 minutes)*

**Presenters:** PICH, Antonio; PICH, Antonio (University of Valencia)

**Session Classification:** QCD I

Contribution ID: 20

Type: **not specified**

## **R-scan (VEPP)**

*Tuesday 16 September 2014 10:40 (20 minutes)*

**Presenter:** GOLUBEV, Vladimir (Budker Institute of Nuclear Physics)

**Session Classification:** QCD II

Contribution ID: 21

Type: **not specified**

## **R-scan (KEDR)**

*Tuesday 16 September 2014 11:25 (20 minutes)*

**Presenter:** TODYSHEV, Korneliy (BINP)

**Session Classification:** QCD II

Contribution ID: 22

Type: **not specified**

## **R-scan/ISR/two-photon (BES III)**

*Tuesday 16 September 2014 11:00 (25 minutes)*

**Presenter:** DENIG, Achim (Univ. Mainz)

**Session Classification:** QCD II



Contribution ID: 23

Type: **not specified**

## **Measurement of Hadronic Cross Section with ISR/Two-Photon Events at Belle (BELLE)**

*Tuesday 16 September 2014 14:00 (20 minutes)*

**Presenter:** NAKAZAWA, Hideyuki (National Central University)

**Session Classification:** QCD III

Contribution ID: 24

Type: **not specified**

## ISR results from BABAR and g-2

*Tuesday 16 September 2014 14:20 (20 minutes)*

**Presenter:** DAVIER, Michel (Lab.de Phys.Nucleaire et de Hautes Energie/LPNHE (LPNHE))

**Session Classification:** QCD III

Contribution ID: 25

Type: **not specified**

## **Results and prospects on hadronic cross section and gammagamma physics at kloe/kloe2**

*Tuesday 16 September 2014 11:45 (20 minutes)*

**Presenter:** Dr MANDAGLIO, Giuseppe

**Session Classification:** QCD II

Contribution ID: 26

Type: **not specified**

## **ISR-FSR Interference (BaBar)**

*Tuesday 16 September 2014 13:40 (20 minutes)*

**Presenter:** WANG, LIANGLIANG

**Session Classification:** QCD III

Contribution ID: 27

Type: **not specified**

## **g-2 Theory Update**

*Tuesday 16 September 2014 14:40 (20 minutes)*

**Presenter:** MARQUARD, Peter (KIT)

**Session Classification:** QCD III

Contribution ID: 28

Type: **not specified**

## **g-2 LBL Contribution**

*Tuesday 16 September 2014 15:00 (20 minutes)*

**Presenter:** MASJUAN QUERALT, Pere (u)

**Session Classification:** QCD III

Contribution ID: 29

Type: **not specified**

## **QCD, Alpha(s), Heavy Quark Mass and Sum Rules**

*Tuesday 16 September 2014 16:10 (20 minutes)*

**Presenter:** STURM, Christian

**Session Classification:** QCD IV

Contribution ID: **30**

Type: **not specified**

## **Alpha(s) and Tau Decays**

*Tuesday 16 September 2014 16:50 (20 minutes)*

**Presenter:** ZHANG, Zhiqing Philippe (LAL, Orsay (FR))

**Session Classification:** QCD IV



Contribution ID: **31**

Type: **not specified**

## **Analysis strategies for alpha\_s from tau decays**

*Tuesday 16 September 2014 17:10 (20 minutes)*

**Presenter:** JAMIN, Matthias (u)

**Session Classification:** QCD IV

Contribution ID: 32

Type: **not specified**

## **Update on strong coupling after the revised ALEPH data for hadronic tau decays**

*Tuesday 16 September 2014 17:30 (20 minutes)*

**Presenters:** MALTMAN, Kim (York University); Prof. GOLTERMAN, Maarten (San Francisco State University); PERIS, Santiago (Instituto de Fisica de Altas Energias (IFAE))

**Session Classification:** QCD IV

Contribution ID: 33

Type: **not specified**

## **Tauola: Modelling Tau Decays**

*Monday 15 September 2014 16:00 (20 minutes)*

**Presenter:** WAS, Zbigniew Andrzej (Polish Academy of Sciences (PL))

**Session Classification:** Tau Properties IV

Contribution ID: 34

Type: **not specified**

## Pythia8: Simulating Tau Decays

*Monday 15 September 2014 16:40 (20 minutes)*

**Presenter:** ILTEN, Philip (Massachusetts Inst. of Technology (US))

**Session Classification:** Tau Properties IV

Contribution ID: 35

Type: **not specified**

## **Simulating Tau Decays with Sherpa and Herwig++**

*Monday 15 September 2014 17:00 (20 minutes)*

**Presenter:** SCHULZ, Holger (HU Berlin)

**Session Classification:** Tau Properties IV

Contribution ID: **36**

Type: **not specified**

**TBA**

Contribution ID: 37

Type: **not specified**

## Discussion

*Monday 15 September 2014 17:20 (40 minutes)*

**Session Classification:** Tau Properties IV

Contribution ID: **38**

Type: **not specified**

## **LFV Intro: Overview**

*Wednesday 17 September 2014 09:00 (25 minutes)*

**Presenter:** UCHIDA, Yoshi (Imperial College London)

**Session Classification:** Lepton Flavour Violation I



Contribution ID: **39**

Type: **not specified**

## **LVF Theory**

*Wednesday 17 September 2014 09:25 (20 minutes)*

**Presenter:** Mrs PASSEMAR, Emilie (Institut de Physique Nucléaire)

**Session Classification:** Lepton Flavour Violation I

Contribution ID: 40

Type: **not specified**

## **Lepton Flavour Violating Tau Decays at Belle (BELLE)**

*Wednesday 17 September 2014 09:45 (20 minutes)*

**Presenter:** HAYASAKA, Kiyoshi (Nagoya Univ.)

**Session Classification:** Lepton Flavour Violation I

Contribution ID: 41

Type: **not specified**

## **LFV from LHCb: tau->3mu, tau->p2mu (LHCb)**

*Wednesday 17 September 2014 10:05 (25 minutes)*

**Presenter:** CHRZASZCZ, Marcin (University of Zurich (CH), Polish Academy of Sciences (PL))

**Session Classification:** Lepton Flavour Violation I

Contribution ID: 42

Type: **not specified**

## LFV Higgs

*Wednesday 17 September 2014 11:00 (20 minutes)*

**Presenter:** Mr VERDIER, Patrice (IN2P3)

**Session Classification:** Lepton Flavour Violation II

Contribution ID: 43

Type: **not specified**

## **CLFV in muon decays (MEG)**

*Wednesday 17 September 2014 12:00 (20 minutes)*

**Presenter:** RIPICCINI, Emanuele

**Session Classification:** Lepton Flavour Violation II

Contribution ID: 44

Type: **not specified**

## **LFV: Majorana neutrinos in B and D decays**

*Wednesday 17 September 2014 11:20 (20 minutes)*

**Presenters:** Dr DEPPISCH, Frank (University College London (UK)); Dr DEPPISCH, Frank (DESY); Dr DEPPISCH, Frank (DESY)

**Session Classification:** Lepton Flavour Violation II

Contribution ID: 45

Type: **not specified**

## **Mu2e Experiment**

*Wednesday 17 September 2014 12:20 (20 minutes)*

**Presenter:** Dr BROWN, David (LAWRENCE BERKELEY NATIONAL LAB)

**Session Classification:** Lepton Flavour Violation II

Contribution ID: 46

Type: **not specified**

## The mu3e Experiment at PSI

*Wednesday 17 September 2014 12:40 (20 minutes)*

**Presenter:** BRAVAR, Sandro (Universite de Geneve (CH))

**Session Classification:** Lepton Flavour Violation II



Contribution ID: 47

Type: **not specified**

## **Neutrino physics: status and open questions**

*Wednesday 17 September 2014 14:40 (25 minutes)*

**Presenter:** Prof. KUDENKO, Yury (Russian Academy of Sciences (RU))

**Session Classification:** Neutrino Physics I

Contribution ID: 48

Type: **not specified**

## **MINOS+NOVA: results /status**

*Wednesday 17 September 2014 15:30 (25 minutes)*

**Presenter:** Dr COELHO, Joao

**Session Classification:** Neutrino Physics I

Contribution ID: 49

Type: **not specified**

**TBA**

Contribution ID: 50

Type: **not specified**

## **T2K: recent results and prospects**

*Wednesday 17 September 2014 15:05 (25 minutes)*

**Presenter:** BARKER, Gary (University of Warwick (GB))

**Session Classification:** Neutrino Physics I

Contribution ID: 51

Type: **not specified**

## **Sterile neutrino: experiment and theory**

*Wednesday 17 September 2014 16:20 (25 minutes)*

**Presenters:** MEZZETTO, Mauro (Universita e INFN (IT)); MEZZETTO, Mauro (Dipartimento di Fisica Galileo Galilei); MEZZETTO, Mauro (INFN)

**Session Classification:** Neutrino Physics II

Contribution ID: 52

Type: **not specified**

## Neutrino Reactor Experiments

*Wednesday 17 September 2014 16:45 (25 minutes)*

**Presenters:** JETTER, Soeren (Berlin); JETTER, Soeren (Institute for High Energy Physics, Chinese Academy of Sciences)

**Session Classification:** Neutrino Physics II

Contribution ID: 53

Type: **not specified**

## **Future Prospects for Measurements of Mass Hierarchy and CP Violation**

*Wednesday 17 September 2014 17:10 (25 minutes)*

**Presenters:** LANG, Karol (Unknown); LANG, Karol (University of Texas at Austin)

**Session Classification:** Neutrino Physics II

Contribution ID: 54

Type: **not specified**

## **Review of Double Beta Decay Experiments**

*Wednesday 17 September 2014 17:35 (25 minutes)*

**Presenter:** Dr MANESCHG, Werner

**Session Classification:** Neutrino Physics II



Contribution ID: 55

Type: **not specified**

## **Tau Trigger/Reconstruction/ID ATLAS**

*Thursday 18 September 2014 09:00 (20 minutes)*

**Presenter:** LIMBACH, Christian (Universitaet Bonn (DE))

**Session Classification:** LHC Physics I

Contribution ID: 56

Type: **not specified**

## **Tau Trigger/Reconstruction/ID CMS**

*Thursday 18 September 2014 09:20 (20 minutes)*

**Presenter:** VEELKEN, Christian (Ecole Polytechnique (FR))

**Session Classification:** LHC Physics I

Contribution ID: 57

Type: **not specified**

## Higgs->tautau ATLAS

*Thursday 18 September 2014 09:40 (20 minutes)*

**Presenter:** SCHWINDT, Thomas (Universitaet Bonn (DE))

**Session Classification:** LHC Physics I

Contribution ID: 58

Type: **not specified**

## **Higgs->tautau CMS**

*Thursday 18 September 2014 10:00 (20 minutes)*

**Presenter:** MULLER, Thomas (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** LHC Physics I

Contribution ID: 59

Type: **not specified**

## SM Physics with Taus: Z, W

*Thursday 18 September 2014 11:00 (20 minutes)*

**Presenters:** ILTEN, Philip (Massachusetts Inst. of Technology (US)); ILTEN, Philip (Department of Physics - Laboratory for Nuclear Science (LNS) - M)

**Session Classification:** LHC Physics II

Contribution ID: **60**

Type: **not specified**

## Charged Higgs

*Thursday 18 September 2014 11:20 (20 minutes)*

**Presenter:** CHAKRABORTY, Dhiman (Northern Illinois University (US))

**Session Classification:** LHC Physics II

Contribution ID: **61**

Type: **not specified**

## **Exotics/Susy**

*Thursday 18 September 2014 11:40 (20 minutes)*

**Presenter:** KNUTZEN, Simon (Rheinisch-Westfaelische Tech. Hoch. (DE))

**Session Classification:** LHC Physics II

Contribution ID: 62

Type: **not specified**

## **Heavy Quarks and Taus Intro: Theory/New Physics**

*Thursday 18 September 2014 12:00 (20 minutes)*

**Presenter:** CELIS, Alejandro (IFIC CSIC-Universitat de Valencia)

**Session Classification:** Heavy Quarks and Taus



Contribution ID: 63

Type: **not specified**

## $B \rightarrow D^* \tau \nu + B \rightarrow \tau \nu$ (BELLE)

*Thursday 18 September 2014 12:20 (20 minutes)*

**Presenter:** KUHR, Thomas (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** Heavy Quarks and Taus

Contribution ID: 64

Type: **not specified**

## **Heavy Mesons Decays including Taus (BaBar)**

*Thursday 18 September 2014 12:40 (20 minutes)*

**Presenter:** HEARTY, Christopher (University of British Columbia)

**Session Classification:** Heavy Quarks and Taus

Contribution ID: 65

Type: **not specified**

## **BELLE-II**

*Friday 19 September 2014 09:00 (25 minutes)*

**Presenter:** Prof. SHWARTZ, Boris (Budker Institute (Novosibirsk, Russia))

**Session Classification:** Future Experiments I

Contribution ID: **66**

Type: **not specified**

## **Tau Physics at HIEPAF in China**

*Friday 19 September 2014 09:25 (25 minutes)*

**Presenter:** PENG, Haiping (Univ. of Science & Tech. of China (CN))

**Session Classification:** Future Experiments I

Contribution ID: 67

Type: **not specified**

## Novosibirsk Tau Charm Factory

*Friday 19 September 2014 09:50 (25 minutes)*

**Presenter:** EYDELMAN, Simon (Budker Institute of Nuclear Physics (RU))

**Session Classification:** Future Experiments I

Contribution ID: **68**

Type: **not specified**

## **g-2 Experiments JPARC**

*Friday 19 September 2014 10:45 (25 minutes)*

**Presenter:** SAITO, Naohito (KEK)

**Session Classification:** Future Experiments II

Contribution ID: **69**

Type: **not specified**

## **g-2 Experiments FNAL**

*Friday 19 September 2014 11:10 (25 minutes)*

**Presenter:** KASPAR, Jarek (University of Washington)

**Session Classification:** Future Experiments II

Contribution ID: 70

Type: **not specified**

## Future LFV Experiments



Contribution ID: 71

Type: **not specified**

## **Neutrinos: Summary and Perspectives**

*Friday 19 September 2014 11:35 (25 minutes)*

**Presenter:** Dr WEBER, Alfons (STFC/RAL)

**Session Classification:** Future Experiments II

Contribution ID: 72

Type: **not specified**

## Summary Talk

*Friday 19 September 2014 12:00 (40 minutes)*

**Presenter:** Prof. LAFFERTY, George (University of Manchester (GB))

**Session Classification:** Summary and Announcements

Contribution ID: 73

Type: **not specified**

## **Announcements from LOC / IAC**

*Friday 19 September 2014 12:40 (20 minutes)*

**Presenters:** STAHL, Achim (Rheinisch-Westfaelische Tech. Hoch. (DE)); DAVIER, Michel (Lab.de Phys.Nucleaire et de Hautes Energie/LPNHE (LPNHE))

**Session Classification:** Summary and Announcements

Contribution ID: 74

Type: **not specified**

## **Recent results on searches for heavy Majorana neutrinos**

*Wednesday 17 September 2014 11:40 (20 minutes)*

**Presenter:** HARRISON, Jon (University of Manchester (GB))

**Session Classification:** Lepton Flavour Violation II

Contribution ID: 75

Type: **not specified**

## **Vus including Kspi- , Kspi-pi0 - BR and Spectra**

Contribution ID: 76

Type: **not specified**

## **Towards a determination of the tau lepton dipole moments**

*Monday 15 September 2014 11:50 (20 minutes)*

**Presenter:** FAEL, Matteo (University of Padova)

**Session Classification:** Tau Properties II

Contribution ID: 77

Type: **not specified**

## **RCHL and alternative Models and Tau Decays (Theory)**

*Monday 15 September 2014 15:40 (20 minutes)*

**Presenters:** ROIG, Pablo (IFAE); ROIG GARCÉS, Pablo (urn:Facebook)

**Session Classification:** Tau Properties IV

Contribution ID: 78

Type: **not specified**

## **A tau-data-based study of systematic issues and a hybrid strategy for the lattice evaluation of $(g-2)_\mu$**

*Tuesday 16 September 2014 15:20 (20 minutes)*

**Presenters:** MALTMAN, Kim (York University); Prof. GOLTERMAN, Maarten (San Francisco State University); PERIS, Santiago (Instituto de Fisica de Altas Energias (IFAE))

**Session Classification:** QCD III



Contribution ID: 79

Type: **not specified**

## **Dark Photons (BaBar)**

*Wednesday 17 September 2014 14:00 (20 minutes)*

**Presenter:** HEARTY, Christopher (University of British Columbia)

**Session Classification:** Dark Sector

Contribution ID: **80**

Type: **not specified**

## **Search for exotic scalars in the two-photon channel at BaBar**

*Wednesday 17 September 2014 14:20 (20 minutes)*

**Presenter:** BEAULIEU, Alexandre (University of Victoria)

**Session Classification:** Dark Sector

Contribution ID: **81**

Type: **not specified**

## **Guided tour of museum**

Contribution ID: 82

Type: **not specified**

## **Study of the tau meson decay modes with Monte Carlo generator TAUOLA. Status and perspectives.**

*Monday 15 September 2014 16:20 (20 minutes)*

**Presenter:** SHEKHOVTSOVA, olga (IFJ Cracow Poland)

**Session Classification:** Tau Properties IV