

# **WHAT IS $\nu$ ? INVISIBLES12 and Alexei Smirnov Fest**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

## **Brane, Bulk and Superluminal Travel**

**Presenter:** WEILER, Thomas (Inst. fuer Experimentelle Kernphys.-Universitaet Karlsruhe-Karl)

Contribution ID: 1

Type: **not specified**

## Vectorlike matter and grand unification

**Presenter:** , Borut Bajc (J. Stefan Institute, Ljubljana)

Contribution ID: 2

Type: **not specified**

## **Perturbations to mu-tau symmetry in neutrino mixing**

**Primary author:** MARFATIA, Danny

**Presenter:** MARFATIA, Dany (University of Kansas)

Contribution ID: 3

Type: **not specified**

## Coherence of Supernova Neutrinos

**Presenter:** KERSTEN, Joern (University of Hamburg)

Contribution ID: 4

Type: **not specified**

## **GLOBES**

**Presenter:** Dr HUBER, Patrick (Univ. of Wisconsin)

Contribution ID: 5

Type: **not specified**

## Reactor neutrino fluxes

**Presenter:** HUBER, Patrick (Virginia Tech)

Contribution ID: 6

Type: **not specified**

## **Can heavy neutrinos dominate neutrinoless double beta decay?**

**Primary author:** LOPEZ PAVON, Jacobo (Durham University)

**Presenter:** LOPEZ PAVON, Jacobo (Durham University)



Contribution ID: 7

Type: **not specified**

## What is $\nu$ ? news from cosmology

**Primary author:** JIMENEZ, Raul (Cern)

**Presenter:** JIMENEZ, Raul (Cern)

Contribution ID: 8

Type: **not specified**

## Fermionic dark matter via Higgs portal

**Primary author:** LOPEZ HONOREZ, Laura

**Presenter:** LOPEZ HONOREZ, Laura (MPI Heidelberg)

Contribution ID: 9

Type: **not specified**

## **Probing non-standard neutrino properties with dark matter detectors**

**Presenter:** POSPELOV, Maxim (University of Victoria)

Contribution ID: **10**

Type: **not specified**

## **Fingerprinting Dark Energy: distinctive marks of viscosity**

**Presenter:** MAJEROTTO, Elisabetta (UAM)

Contribution ID: 11

Type: **not specified**

## **Standard Model ++**

**Presenter:** ANCHORDOQUI, Luis (University of Wisconsin-Milwaukee)

Contribution ID: 12

Type: **not specified**

## Neutrinos from the Fermi Bubbles

**Presenter:** Prof. LUNARDINI, Cecilia (University of Washington - Seattle)

Contribution ID: 13

Type: **not specified**

## **Pseudo Nambu-Goldstone bosons and dark matter candidates**

**Presenter:** FRIGERIO, Michele (IFAE, UAB, Barcelona)

Contribution ID: 14

Type: **not specified**

## **A large reactor mixing angle from Flavor models**

**Presenter:** SPINRATH, Martin



Contribution ID: 15

Type: **not specified**

## Quark and Lepton Flavour

**Presenter:** KAYSER, Boris

Contribution ID: 16

Type: **not specified**

## **New Physics Beyond Flavour Dogmas**

**Presenter:** BRANCO, Gustavo (Technical University of Lisbon)

Contribution ID: 17

Type: **not specified**

## Nus in Astroph and Cosmology

**Presenter:** Dr RAFFELT, Georg (Max Planck Institut fuer Physik)

Contribution ID: **18**

Type: **not specified**

## **On the Potential of Lepton Minimal Flavour Violation**

**Presenter:** ALONSO, Rodrigo (UAM)

Contribution ID: 19

Type: **not specified**

## A SUSY SU(5) x T' Unified

**Presenter:** MERONI, Aurora (SISSA)

Contribution ID: 20

Type: **not specified**

## Nus in Astroph and Cosmology

**Presenter:** Dr RAFFELT, Georg (Max Planck Institut fuer Physik)

Contribution ID: 21

Type: **not specified**

## **Do the recent neutrino oscillation, LHC and Fermi results indicate a framework?**

**Presenter:** Dr RAIDAL, Martti (Nat. Inst. of Chem.Phys. & Biophys. (EE))

Contribution ID: 22

Type: **not specified**

## **Lepton Mixing and Lepton Flavour Violation in Holographic Composite Higgs**

**Presenter:** Ms HAGEDORN, Claudia (Max-Planck-Institut fuer Kernphysik)



Contribution ID: 23

Type: **not specified**

## **S\_3 and the angle $\theta_{13}$**

**Presenter:** Dr VELASCO-SEVILLA, Liliana (University of Minnesota)

Contribution ID: 24

Type: **not specified**

## Quark and Lepton Flavour

**Presenter:** KAYSER, Boris

Contribution ID: 25

Type: **not specified**

## **BSM and GUTs**

**Presenter:** , Andrea Romanino

Contribution ID: 26

Type: **not specified**

## **Some comments on the flavor mix and magnitude of High Energy Astrophysical Neutrino fluxes**

**Presenter:** PAKVASA, sandip (university of hawaii)

Contribution ID: 27

Type: **not specified**

## The von Dyck symmetries and mixing

**Presenter:** HERNANDEZ, Daniel

Contribution ID: 28

Type: **not specified**

## Nus in Astroph and Cosmology

**Presenter:** Dr RAFFELT, Georg (Max Planck Institut fuer Physik)

Contribution ID: 29

Type: **not specified**

## Neutrino cosmology

**Presenter:** GOLDBERG, Haim (Northwestern U)

Contribution ID: **30**

Type: **not specified**

## **Theoretical uncertainties in diffuse gamma-ray constraints on dark matter**

**Presenter:** BLANCHET, Steve (Ecole Polytechnique Federale de Lausanne)



Contribution ID: 31

Type: **not specified**

## Detectors for Neutrino Physics

**Presenter:** PARA, Adam (Fermi National Accelerator Lab. (Fermilab)-Unknown-Unknown)

Contribution ID: 32

Type: **not specified**

## **New physics effects in neutrino fluxes from cosmic accelerators**

**Presenter:** POONAM, Mehta (Univ of Delhi)

Contribution ID: 33

Type: **not specified**

## **EU nodes overview/Madrid premeeting resume**

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

Contribution ID: 34

Type: **not specified**

## **Cosmological bounds on neutrino masses**

**Presenter:** SALVADO, Jordi

Contribution ID: 35

Type: **not specified**

## **Columbia Univ./XENON node**

**Presenter:** BAUDIS, Laura (University of Zurich)

Contribution ID: **36**

Type: **not specified**

## **Tokyo(ICCR-IPPMU) node**

**Presenter:** Prof. HERNANDEZ, Pilar (University of Valencia)

Contribution ID: 37

Type: **not specified**

## **DM detection in a Radiative Neutrino Mass Model**

**Presenter:** TOMA, Takashi

Contribution ID: **38**

Type: **not specified**

## **CERN node**

**Presenter:** Dr WILDNER, Elena (CERN)



Contribution ID: 39

Type: **not specified**

## **Neutrino Physics from recent Cosmological data**

**Presenter:** ARCHIDIACONO, Maria

Contribution ID: 40

Type: **not specified**

## Harvard Node

**Presenter:** GAVELA, Belen (Universidad Autonoma de Madrid)

Contribution ID: 41

Type: **not specified**

## Fermilab Node

**Presenter:** PARKE, Stephen (Fermi National Accelerator Lab. (US))

Contribution ID: 42

Type: **not specified**

## **Ring-like and aberration patterns in directional dark matter detection**

**Presenter:** BOZORGNI, Nassim

Contribution ID: 43

Type: **not specified**

## Delhi Node

**Presenter:** CHOUDHARY, Brajesh (University of Delhi (IN))

Contribution ID: 44

Type: **not specified**

## HRI Node

**Presenter:** CHOUBEY, Sandhya (Harish Chandra Research Institute)

Contribution ID: 45

Type: **not specified**

## **Interplay between direct detection and collider for neutralino dark matter**

**Presenter:** ARCADI, Giorgio

Contribution ID: 46

Type: **not specified**

## Iran Node

**Presenter:** FARZAN, Yasaman (Unknown)



Contribution ID: 47

Type: **not specified**

## **Interacting dark matter contribution to the Galactic 511 keV gamma ray emission**

**Presenter:** VINCENT, Aaron

Contribution ID: 48

Type: **not specified**

## **High Energy Physics and Open Access: is the Scoap3 initiative proposed by CERN pushing the industry in the right direction?**

**Presenter:** BALLI, Enrico Maria (Sissa Medialab)

Contribution ID: 49

Type: **not specified**

## Conference presentation

**Presenter:** GAVELA, Belen (Universidad Autonoma de Madrid)

Contribution ID: 50

Type: **not specified**

## **Exp. review – accelerators**

**Presenter:** WALTER, Chris (Duke University)

Contribution ID: 51

Type: **not specified**

## **Exp. review – reactors**

**Presenter:** WANG, Yifang (Daya Bay)

Contribution ID: 52

Type: **not specified**

## Review on global fits

**Presenter:** SCHWETZ-MANGOLD, Thomas (Max-Planck-Gesellschaft (DE))

Contribution ID: 53

Type: **not specified**

## Theoretical implications of large $\mathbb{R}^3$

**Presenter:** KING, Steve

Contribution ID: 54

Type: **not specified**

## **Physics of Neutrino Oscillations and Flavour Conversion I**

**Presenter:** SMIRNOV, Alexei (ICTP)



Contribution ID: 55

Type: **not specified**

## **Experimental status of LSND and reactor anomalies, and future prospects for sterile neutrino searches**

**Presenter:** BRICE, Steve (Fermilab)

Contribution ID: 56

Type: **not specified**

## **Phenomenological implications of large $\lambda_{13}$ : CP and hierarchy**

**Presenter:** FERNANDEZ MARTINEZ, Enrique

Contribution ID: 57

Type: **not specified**

## **Very Low-energy seesaw and perspective on sterile neutrinos**

**Presenter:** DE GOUVEA, Andre (Unknown)

Contribution ID: 58

Type: **not specified**

## **The challenges and opportunities of future LBL facilities**

**Presenter:** Dr WILDNER, Elena (CERN)

Contribution ID: 59

Type: **not specified**

## **Exp. review on neutrinoless double beta decay**

**Presenter:** BAUDIS, Laura (University of Zurich)

Contribution ID: **60**

Type: **not specified**

## **Exp. review on LHC data**

**Presenter:** LANKFORD, Andrew J (University of California, Irvine)

Contribution ID: **61**

Type: **not specified**

## **Tests of neutrino masses at the LHC**

**Presenter:** Prof. CHEN, Mu-Chun (University of California at Irvine)

Contribution ID: **62**

Type: **not specified**

## **A(4), 013 and CP violation**

**Presenter:** MA, Ernest (University of California, Riverside)



Contribution ID: **63**

Type: **not specified**

## **Neutrinos, GUTs and the Early Universe**

**Presenter:** ANTUSCH, Stefan (MPI of Physics, Munich)

Contribution ID: 64

Type: **not specified**

## **Physics of Neutrino Oscillations and Flavour Conversion II**

**Presenter:** SMIRNOV, Alexei (ICTP)

Contribution ID: 65

Type: **not specified**

## Neutrinos and extra dimensions

**Presenter:** ZUKANOVICH FUNCHAL, renata (Universidade de São Paulo)

Contribution ID: 66

Type: **not specified**

## Uncovering Multiple CP Violating Mechanisms of $b\bar{b}0\nu$ -Decay

**Presenter:** Prof. PETCOV, Serguey (SISSA)

Contribution ID: 67

Type: **not specified**

## **Exp. Review on LFV**

**Presenter:** KUNO, Yoshitaka (Osaka University)

Contribution ID: **68**

Type: **not specified**

## **LFV - theory**

**Presenter:** TEIXEIRA, Ana (LPC Clermont)

Contribution ID: **69**

Type: **not specified**

## **Neutrino Flavour Models and Impact on LFV**

**Presenter:** MERLO, Luca (CERN)

Contribution ID: 70

Type: **not specified**

## **Review on DM searches**

**Presenter:** SCHUMANN, Marc (Univ of Zurich)



Contribution ID: 71

Type: **not specified**

## **The saga of light WIMPS in direct dark matter searches**

**Presenter:** GELMINI, Graciela (Unknown)

Contribution ID: 72

Type: **not specified**

## **DM in BSM theories**

**Presenter:** COVI, Laura (Unknown)

Contribution ID: 73

Type: **not specified**

## **Review on Asymmetric Dark Matter**

**Presenter:** Mr BLENNOW, Mattias (Royal Institute of Technology)

Contribution ID: 74

Type: **not specified**

## **Sterile Neutrinos as warm dark matter**

**Presenter:** Prof. LINDNER, Manfred (Max Planck Institut fuer Kernphysik, Heidelberg, Germany)

Contribution ID: 75

Type: **not specified**

## **Physics of Neutrino Oscillations and Flavour Conversion III**

**Presenter:** SMIRNOV, Alexei (ICTP)

Contribution ID: 76

Type: **not specified**

## **Sterile neutrinos: the dark side of the light fermions**

**Presenter:** KUSENKO, Alexander (UCLA)

Contribution ID: 77

Type: **not specified**

## **When Astrophysics starts to constrain the Supersymmetric parameter space: what is left for the neutralino?**

**Presenter:** BOEHM, Celine (LAPP-Laboratoire d'Annecy-le-Vieux de Physique des Particules ())

Contribution ID: 78

Type: **not specified**

## **Inflation and Right-Handed Sneutrino as Thermal Dark Matter**

**Presenter:** PILAFTSIS, Apostolos (University of Manchester)



Contribution ID: 79

Type: **not specified**

## **The four basic ways of creating dark matter through a portal**

**Presenter:** HAMBYE, Thomas (Univ. L. Brussels)

Contribution ID: **80**

Type: **not specified**

## **DM via the Higgs portal**

**Presenter:** LEBEDEV, Oleg (Unknown)

Contribution ID: **81**

Type: **not specified**

## **Presentation**

**Presenter:** FRIGERIO, Michele (IFAE, UAB, Barcelona)

Contribution ID: 82

Type: **not specified**

## **Past, Present and Future of Neutrino Oscillation Experiments**

**Presenter:** SUZUKI, Yoichiro (Institute for Cosmic Ray Research, Univ. of Tokyo)

Contribution ID: 83

Type: **not specified**

## **Paradoxes of Neutrino Oscillations**

**Presenter:** AKHMEDOV, Evgeny (MPG)

Contribution ID: **84**

Type: **not specified**

## **UHE cosmic neutrinos: failures and hopes**

**Presenter:** BEREZINSKY, Venya (INFN Laboratori Nazionali del Gran Sasso)

Contribution ID: 85

Type: **not specified**

## **Collective neutrino flavor oscillations**

**Presenter:** Dr RAFFELT, Georg (Max Planck Institut fuer Physik)

Contribution ID: **86**

Type: **not specified**

## Supernova Neutrinos

**Presenter:** DIGHE, Amol (Unknown)



Contribution ID: **87**

Type: **not specified**

## **Sterile Neutrinos**

**Presenter:** MALTONI, Michele (Unknown)

Contribution ID: **88**

Type: **not specified**

## **Solar neutrinos and neutrino physics in Brazil**

**Presenter:** DE HOLANDA, Pedro (Unicamp)

Contribution ID: **89**

Type: **not specified**

## **Flavour structure from the seesaw**

**Presenter:** SCHMIDT, Michael (The University of Melbourne)

Contribution ID: **90**

Type: **not specified**

## **Neutrino Oscillation and Neutrino Velocity**

**Presenter:** MINAKATA, Hisakazu (Tokyo Metropolitan University)

Contribution ID: **91**

Type: **not specified**

## **Neutrino mass models – an $S_0(10)$ perspective**

**Presenter:** MOHAPATRA, Rabindra (U)

Contribution ID: 92

Type: **not specified**

## **Brief remarks & conclusions**

**Presenter:** SMIRNOV, Alexei (ICTP)

Contribution ID: 93

Type: **not specified**

## **Exp. Cosmology update**

**Presenter:** VERDE, Licia (ICREA & ICC)

Contribution ID: 94

Type: **not specified**

## Review on $\nu$ masses from cosmology

**Presenter:** MELCHIORRI, Alessandro (Univ Roma i La Sapienza)



Contribution ID: 95

Type: **not specified**

## **Cosmological lepton asymmetry with a nonzero mixing angle $\theta_{13}$**

**Presenter:** PASTOR, Sergio (IFIC)

Contribution ID: 96

Type: **not specified**

## **Leptogenesis confronting neutrino data**

**Presenter:** DI BARI, Pasquale (Unknown)

Contribution ID: 97

Type: **not specified**

## **Physics of Neutrino Oscillations and Flavour Conversion IV**

**Presenter:** SMIRNOV, Alexei (ICTP)

Contribution ID: **98**

Type: **not specified**

## **Constraining Neutrinos With BBN and the CMB**

**Presenter:** STEIGMAN, Gary (Ohio State Univ)

Contribution ID: 99

Type: **not specified**

## **Using neutrino telescopes to learn about particle physics, astrophysics and cosmology**

**Presenter:** MOCIOIU, Irina (Pennsylvania State University)

Contribution ID: **100**

Type: **not specified**

## **Sterile neutrinos in Icecube**

**Presenter:** CHOUBEY, Sandhya (Harish Chandra Research Institute)

Contribution ID: **101**

Type: **not specified**

## Superluminal Nus

**Presenter:** COHEN, Andy (Boston Univ)

Contribution ID: **102**

Type: **not specified**

## **Discussion/Conclusions**

**Presenter:** KAYSER, Boris



Contribution ID: **103**

Type: **not specified**

## **MFV in the leptonic sector with two Higgs doublets**

**Presenter:** NESBITT REBELO DA SILVA, Margarida (Instituto Superior Tecnico (IST))

Contribution ID: **104**

Type: **not specified**

## **Neutrinos from Gamma-Ray Bursts, and tests of the cosmic ray paradigm**

**Presenter:** WINTER, Walter (Wurzburg University)

Contribution ID: **105**

Type: **not specified**

## **Ultra.high energy neutrino searches**

**Presenter:** LUHN, Christoph (University of Durham)

Contribution ID: **106**

Type: **not specified**

## **News about *nus***

**Presenter:** JENKINS, Elizabeth (Univ of California)

Contribution ID: **107**

Type: **not specified**

## **Minimal 3+2 neutrino model versus oscillation anomalies**

**Presenter:** Prof. HERNANDEZ, Pilar (University of Valencia)

Contribution ID: **108**

Type: **not specified**

## Neutrino wakes in LSS

**Presenter:** PEÑA GARAY, Carlos (Univ de Valencia)

Contribution ID: **109**

Type: **not specified**

## **Neutrino masses and TeV scale: going beyond the tree-level $d=5$ operator**

**Presenter:** BONNET, florian (INFN Sezione di Padova)

Contribution ID: **110**

Type: **not specified**

## **Flavor symmetries - finding tests and alternatives**

**Presenter:** PAES, Heinrich (University of Alabama)



Contribution ID: 111

Type: **not specified**

## **Beyond dark matter detection with neutrino telescopes**

**Presenter:** PALOMARES-RUIZ, Sergio (IST)

Contribution ID: 112

Type: **not specified**

## **The Majorana bubble. Dreams, propaganda in facts in bbonu landscape**

**Presenter:** GOMEZ CADENAS, Juan Jose (Universidad de Valencia (ES))

Contribution ID: 113

Type: **not specified**

## **Strong Higgs dynamics with MFV**

**Presenter:** YEPES, Juan (Instituto de Física Teórica UAM/CSIC)

Contribution ID: 114

Type: **not specified**

## Electroweak corrections for the LHC

**Presenter:** MANOHAR, Aneesh (UCSD)

Contribution ID: 115

Type: **not specified**

## **A review of Fermilab Long-Baseline Neutrino Program**

**Presenter:** CHOUDHARY, Brajesh (University of Delhi (IN))

Contribution ID: **116**

Type: **not specified**

## **Complementary roles of a neutrino detector**

**Presenter:** NUNOKAWA, Hiroshi (Pontificia Universidade Catolica do Rio de Janeiro)

Contribution ID: 117

Type: **not specified**

## Gauge field as a dark matter candidate

**Presenter:** FARZAN, Yasaman (Unknown)

Contribution ID: **118**

Type: **not specified**

## **A Minimal Model of Neutrino Flavor**

**Presenter:** Dr WINGERTER, Akin (Ohio State University)



Contribution ID: **119**

Type: **not specified**

## **Leptogenesis with small violation of B-L**

**Presenter:** RIUS, Nuria (Valencia University)

Contribution ID: 120

Type: **not specified**

## **Lepton flavor violation in minimal flavor violation extensions of the seesaw**

**Presenter:** NARDI, Enrico (INFN)

Contribution ID: 121

Type: **not specified**

## **Neutrino diffraction: finite-size corrections to Fermi's Golden rule**

**Presenter:** ISHIKAWA, Kenzo