

# **Neutrino and Dark Matter in Nuclear Physics 2015**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Open call - the search for future scientific activity in the Pyhäsalmi mine**

**Author:** AITTOLA, Marko (University of Oulu)

**Presenter:** AITTOLA, Marko (University of Oulu)

Contribution ID: 2

Type: **not specified**

## Status of the RED experiment

*Tuesday 2 June 2015 12:00 (30 minutes)*

**Presenter:** AKIMOV, Dmitry (SSC RF ITEP of NRC “Kurchatov Institute”)

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 3

Type: **not specified**

## **Theoretical estimates of supernova neutrino scattering off the stable cadmium isotopes**

**Presenter:** ALMOSLY, Wafa

Contribution ID: 4

Type: **not specified**

## **Heavy element nucleosynthesis in core-collapse supernovae and neutron star mergers**

*Monday 1 June 2015 11:30 (30 minutes)*

**Presenter:** ARCONES, Almudena

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 5

Type: **not specified**

## **Neutrino properties, collective neutrino oscillations, and r-process nucleosynthesis**

*Friday 5 June 2015 08:20 (30 minutes)*

**Presenter:** BALANTEKIN, Baha

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 6

Type: **not specified**

## **Review of modern double beta decay experiments**

*Wednesday 3 June 2015 10:00 (30 minutes)*

**Presenter:** BARABASH, Alexander

**Session Classification:** Double Beta Decay

Contribution ID: 7

Type: **not specified**

## **Double beta decay matrix elements in the IBM-2 with isospin restoration**

*Wednesday 3 June 2015 15:00 (20 minutes)*

**Presenter:** BAREA, Jose

**Session Classification:** Double Beta Decay



Contribution ID: 8

Type: **not specified**

## **Results and strategies for dark matter investigations**

*Thursday 4 June 2015 09:00 (30 minutes)*

**Presenter:** BELLI, Pierluigi

**Session Classification:** Dark Matter

Contribution ID: 9

Type: **not specified**

## **CUORE-0 experiment: first physics results**

*Wednesday 3 June 2015 17:40 (20 minutes)*

**Presenter:** BIASSONI, Matteo

**Session Classification:** Double Beta Decay

Contribution ID: **10**

Type: **not specified**

## **Penning-trap mass spectrometry and neutrino physics**

*Monday 1 June 2015 09:50 (30 minutes)*

**Presenter:** BLAUM, Klaus

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 11

Type: **not specified**

## **The present generation of bolometers for double beta decay searches**

*Wednesday 3 June 2015 09:00 (30 minutes)*

**Presenter:** BROFFERIO, Chiara

**Session Classification:** Double Beta Decay

Contribution ID: 12

Type: **not specified**

## **Exploring solar neutrinos - recent results and future opportunities**

*Thursday 4 June 2015 14:30 (30 minutes)*

**Presenter:** CALAPRICE, Frank

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 13

Type: **not specified**

## **The nuclear matrix elements of $0\nu\beta\beta$ decay and the NUMEN project at INFN-LNS**

*Tuesday 2 June 2015 11:30 (30 minutes)*

**Presenter:** CAPPUZZELLO, Francesco

**Session Classification:** Double Beta Decay

Contribution ID: 14

Type: **not specified**

## **DAMA/LIBRA-phase1 results, perspectives of phase-2 and beyond**

*Monday 1 June 2015 11:30 (30 minutes)*

**Presenter:** CERULLI, Riccardo

**Session Classification:** Dark Matter

Contribution ID: 15

Type: **not specified**

## **Neutrino induced reactions by QRPA and related topics**

*Wednesday 3 June 2015 14:30 (30 minutes)*

**Presenter:** CHEOUN, Myung-Ki

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics



Contribution ID: 16

Type: **not specified**

## **Matrix elements for $2\nu\beta\beta$ and $0\nu\beta\beta$ decays: Current results and applications**

*Wednesday 3 June 2015 09:30 (30 minutes)*

**Presenter:** CIVITARESE, Osvaldo

**Session Classification:** Double Beta Decay

Contribution ID: **18**

Type: **not specified**

## **Prospects for WIMP dark matter and coherent neutrino scattering with the LUX-ZEPLIN detector**

*Monday 1 June 2015 16:30 (20 minutes)*

**Presenter:** DOBI, Attila

**Session Classification:** Dark Matter

Contribution ID: **19**

Type: **not specified**

## **Status of the DANSS project**

*Thursday 4 June 2015 11:30 (30 minutes)*

**Presenter:** EGOROV, Viacheslav

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 20

Type: **not specified**

## **Neutrino nuclear responses for double beta decays and astro neutrino interactions**

*Wednesday 3 June 2015 10:30 (30 minutes)*

**Presenter:** EJIRI, Hiro

**Session Classification:** Double Beta Decay

Contribution ID: 21

Type: **not specified**

## **The MAJORANA DEMONSTRATOR project**

*Tuesday 2 June 2015 12:30 (30 minutes)*

**Presenter:** ELLIOTT, Steve

**Session Classification:** Double Beta Decay

Contribution ID: 22

Type: **not specified**

## **Multi-dimensional simulations of core-collapse supernova explosions with CHIMERA**

*Monday 1 June 2015 12:00 (30 minutes)*

**Presenter:** ENDEVE, Eirik

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 23

Type: **not specified**

## **Reducing uncertainty in the matrix elements governing neutrinoless double-beta decay**

*Thursday 4 June 2015 11:30 (30 minutes)*

**Presenter:** ENGEL, Jonathan

**Session Classification:** Double Beta Decay

Contribution ID: 24

Type: **not specified**

## **Search for neutrinoless double-beta decay of $^{136}\text{Xe}$ with nEXO**

*Tuesday 2 June 2015 12:00 (30 minutes)*

**Presenter:** FARINE, Jacques

**Session Classification:** Double Beta Decay



Contribution ID: 25

Type: **not specified**

## **Role of light nuclear clusters in simulations of core collapse supernovae**

*Wednesday 3 June 2015 11:30 (30 minutes)*

**Presenter:** FISCHER, Tobias

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 26

Type: **not specified**

## **Particle dark matter signals in the anisotropic sky: a cross-correlations approach**

*Thursday 4 June 2015 09:30 (30 minutes)*

**Presenter:** FORNENGO, Nicolao

**Session Classification:** Dark Matter

Contribution ID: 27

Type: **not specified**

## **Charge-exchange reactions, GT transitions and the things beyond for the double beta decay**

*Thursday 4 June 2015 12:30 (30 minutes)*

**Presenter:** FREKERS, Dieter

**Session Classification:** Double Beta Decay

Contribution ID: 28

Type: **not specified**

## **Search for neutrinoless double beta decay with KamLAND-Zen**

*Wednesday 3 June 2015 17:20 (20 minutes)*

**Presenter:** GANDO, Azusa

**Session Classification:** Double Beta Decay

Contribution ID: 29

Type: **not specified**

## The electron capture in $^{163}\text{Ho}$ experiment

*Tuesday 2 June 2015 12:30 (30 minutes)*

**Presenter:** GASTALDO, Loredana

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: **30**

Type: **not specified**

## **Weak and rare low energy nuclear processes**

*Tuesday 2 June 2015 16:00 (30 minutes)*

**Presenter:** GAZIT, Doron

**Session Classification:** Dark Matter

Contribution ID: 31

Type: **not specified**

## **Search for neutrinoless double beta decay with bolometers: R&D towards CUPID**

*Monday 1 June 2015 17:30 (30 minutes)*

**Presenter:** GIULIANI, Andrea

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 32

Type: **not specified**

## Light sterile neutrinos

*Wednesday 3 June 2015 12:00 (30 minutes)*

**Presenter:** GIUNTI, Carlo

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations



Contribution ID: 33

Type: **not specified**

## Rare nuclear single beta decays

*Monday 1 June 2015 14:30 (30 minutes)*

**Presenter:** HAARANEN, Mikko

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 34

Type: **not specified**

## **The DEAP 3600 dark matter search in SNOLAB**

*Thursday 4 June 2015 12:30 (30 minutes)*

**Presenter:** HALLIN, Aksel

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 35

Type: **not specified**

## **Neutrino process in supernova explosion and effects to primitive meteorites**

*Monday 1 June 2015 12:30 (30 minutes)*

**Presenter:** HAYAKAWA, Takehito

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: **36**

Type: **not specified**

## **Structure of nuclei with strangeness and neutron star**

*Wednesday 3 June 2015 16:30 (30 minutes)*

**Presenter:** HIYAMA, Emiko

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 37

Type: **not specified**

## **A path toward ab initio calculations of neutrinoless double beta decay**

*Wednesday 3 June 2015 15:20 (20 minutes)*

**Presenter:** HOLT, Jason

**Session Classification:** Double Beta Decay

Contribution ID: **38**

Type: **not specified**

## **Nuclear matrix elements for double-beta decay: a shell model perspective**

*Thursday 4 June 2015 12:00 (30 minutes)*

**Presenter:** HOROI, Mihai

**Session Classification:** Double Beta Decay

Contribution ID: 39

Type: **not specified**

## **Nuclear matrix elements for $0\nu\beta\beta$ decays with light or heavy Majorana-neutrino exchange**

**Presenter:** HYVÄRINEN, Juhani

Contribution ID: 40

Type: **not specified**

## **Large-scale shell model calculations for neutrinoless double beta decay of $^{48}\text{Ca}$**

*Wednesday 3 June 2015 18:00 (20 minutes)*

**Presenter:** IWATA, Yoritaka

**Session Classification:** Double Beta Decay



Contribution ID: 41

Type: **not specified**

## **Search for the neutrinoless double beta decay with the “GERDA” experiment, status of phase II**

*Monday 1 June 2015 18:00 (20 minutes)*

**Presenter:** JANICSKO, Jozsef

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 42

Type: **not specified**

## **A model for dark matter, naturalness and a complete gauge unification**

*Monday 1 June 2015 16:50 (20 minutes)*

**Presenter:** KAINULAINEN, Kimmo

**Session Classification:** Dark Matter

Contribution ID: 43

Type: **not specified**

## **Supernova neutrinos and nucleosynthesis**

*Tuesday 2 June 2015 09:00 (30 minutes)*

**Presenter:** KAJINO, Toshitaka

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 44

Type: **not specified**

## **New results from RENO**

*Monday 1 June 2015 09:20 (30 minutes)*

**Presenter:** KIM, Soo-Bong

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 45

Type: **not specified**

## **The status and plan for KIMS experiment**

*Wednesday 3 June 2015 11:30 (30 minutes)*

**Presenter:** KIM, Yeongduk

**Session Classification:** Dark Matter

Contribution ID: 46

Type: **not specified**

## **Non-standard neutrino-nucleus interactions**

*Wednesday 3 June 2015 17:00 (30 minutes)*

**Presenter:** KOSMAS, Theocharis

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 47

Type: **not specified**

## **Neutrinoless double beta decay without and with Majoron emission**

*Wednesday 3 June 2015 15:40 (20 minutes)*

**Presenter:** KOTILA, Jenni

**Session Classification:** Double Beta Decay

Contribution ID: 48

Type: **not specified**

## **Mediterranean neutrino telescopes (ANTARES and KM3NeT)**

*Monday 1 June 2015 10:20 (30 minutes)*

**Presenter:** KOUCHNER, Antoine

**Session Classification:** Neutrino Experiments, Methods and Facilities



Contribution ID: 49

Type: **not specified**

## **Evolution of the SNO+ physics programme and status of the detector**

*Monday 1 June 2015 16:30 (30 minutes)*

**Presenter:** KRAUSS, Carsten

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 50

Type: **not specified**

## **Neutrino-nucleus reactions and their role for supernova dynamics and nucleosynthesis**

*Tuesday 2 June 2015 08:30 (30 minutes)*

**Presenter:** LANGANKE, Karlheinz

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 51

Type: **not specified**

## **An effective field theory analysis of the large underground xenon (LUX) first dark matter search**

*Wednesday 3 June 2015 12:00 (30 minutes)*

**Presenter:** LARSEN, Nicole

**Session Classification:** Dark Matter

Contribution ID: 52

Type: **not specified**

## **Supernovae, neutron stars and the equation of state of dense matter**

*Friday 5 June 2015 10:50 (30 minutes)*

**Presenter:** LATTIMER, James

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 53

Type: **not specified**

## **LUMINEU: A demonstrator experiment to search for neutrinoless double beta decay of $^{100}\text{Mo}$ with scintillating bolometer**

*Monday 1 June 2015 18:20 (20 minutes)*

**Presenter:** MANCUSO, Michele

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 54

Type: **not specified**

## **Sterile neutrino dark matter and core collapse supernovae**

*Monday 1 June 2015 12:00 (30 minutes)*

**Presenter:** MATHEWS, Grant

**Session Classification:** Dark Matter

Contribution ID: 55

Type: **not specified**

## **Double-beta decay and nuclear structure correlations**

*Monday 1 June 2015 14:30 (30 minutes)*

**Presenter:** MENENDEZ, Javier

**Session Classification:** Double Beta Decay

Contribution ID: 56

Type: **not specified**

## **Neutrino flavor transformation in compact object mergers and collapsars**

*Friday 5 June 2015 09:20 (30 minutes)*

**Presenter:** MCLAUGHLIN, Gail

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations



Contribution ID: 57

Type: **not specified**

## **Probing the neutrino mass and search for sterile neutrinos with the KATRIN experiment**

*Wednesday 3 June 2015 12:30 (30 minutes)*

**Presenter:** MERTENS, Susanne

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 58

Type: **not specified**

## **Supernova neutrino flavor conversions: Challenges and opportunities**

*Friday 5 June 2015 08:50 (30 minutes)*

**Presenter:** MIRIZZI, Alessandro

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 59

Type: **not specified**

## **Recent results from XENON100 and status of XENONIT at Gran Sasso National Laboratories**

*Monday 1 June 2015 17:10 (20 minutes)*

**Presenter:** MOLINARIO, Andrea

**Session Classification:** Dark Matter

Contribution ID: **60**

Type: **not specified**

## **Indirect dark-matter searches with gamma-rays experiments: status and future plans**

*Thursday 4 June 2015 10:00 (30 minutes)*

**Presenter:** MORSELLI, Aldo

**Session Classification:** Dark Matter

Contribution ID: **61**

Type: **not specified**

## **Neutrino interactions with nucleons and nuclei**

*Tuesday 2 June 2015 09:30 (30 minutes)*

**Presenter:** MOSEL, Ulrich

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: **62**

Type: **not specified**

## **Recent results from Super-Kamiokande**

*Monday 1 June 2015 08:50 (30 minutes)*

**Presenter:** NAKAHATA, Masayuki

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 63

Type: **not specified**

## **Neutrino emissivities from deuteron breakup and formation in supernova**

*Tuesday 2 June 2015 15:30 (20 minutes)*

**Presenter:** NAKAMURA, Satoshi

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 64

Type: **not specified**

## **Decay spectroscopy of neutron-rich nuclei relevant to astrophysical r process**

*Monday 1 June 2015 15:00 (30 minutes)*

**Presenter:** NISHIMURA, Shunji

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics



Contribution ID: 65

Type: **not specified**

## **Recent results and future plans for dark matter searches with PICO**

*Monday 1 June 2015 12:30 (30 minutes)*

**Presenter:** NOBLE, Anthony

**Session Classification:** Dark Matter

Contribution ID: 66

Type: **not specified**

## **Direct search for dark matter with the EDELWEISS-III experiment: New WIMPs results**

*Monday 1 June 2015 17:30 (20 minutes)*

**Presenter:** NONES, Claudia

**Session Classification:** Dark Matter

Contribution ID: 67

Type: **not specified**

## **THEIA: Physics potential of an advanced scintillation detector**

*Tuesday 2 June 2015 11:30 (30 minutes)*

**Presenter:** OREBI GANN, Gabriel

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: **68**

Type: **not specified**

## **Supernova (anti)neutrino induced reactions in nuclei based on relativistic energy density functional**

*Wednesday 3 June 2015 15:00 (30 minutes)*

**Presenter:** PAAR, Nils

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: **69**

Type: **not specified**

## **Results from the OPERA experiment on the CNGS beam**

**Presenter:** PATRIZII, Laura

Contribution ID: 70

Type: **not specified**

## **Flavor evolution of supernova neutrinos as a many-body problem**

*Thursday 4 June 2015 15:00 (30 minutes)*

**Presenter:** PEHLIVAN, Yamac

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 71

Type: **not specified**

## **Dark matter scattering in dense nuclear medium**

*Wednesday 3 June 2015 12:30 (30 minutes)*

**Presenter:** PEREZ-GARCIA, M. Angeles

**Session Classification:** Dark Matter

Contribution ID: 72

Type: **not specified**

## **Predictions for leptonic Dirac CP violation**

*Wednesday 3 June 2015 08:30 (30 minutes)*

**Presenter:** PETCOV, Serguey

**Session Classification:** Double Beta Decay



Contribution ID: 73

Type: **not specified**

## **Systematic approach to $\beta$ and $2\nu\beta\beta$ decays of mass A = 100 – 136 nuclei**

**Presenter:** PIRINEN, Pekka

Contribution ID: 75

Type: **not specified**

## Neutrinoless $\beta\beta$ -decay and physics beyond standard model

*Monday 1 June 2015 15:30 (30 minutes)*

**Presenter:** RATH, Prafulla Kumar

**Session Classification:** Double Beta Decay

Contribution ID: 76

Type: **not specified**

## Exploring low-mass WIMPs with CRESST

*Monday 1 June 2015 17:50 (20 minutes)*

**Presenter:** REINDL, Florian

**Session Classification:** Dark Matter

Contribution ID: 77

Type: **not specified**

## **Results from the OPERA experiment on the CNGS beam**

*Tuesday 2 June 2015 15:50 (20 minutes)*

**Presenter:** RODA, Marco

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 78

Type: **not specified**

## **Right-handed currents in single and double beta decay**

*Wednesday 3 June 2015 14:30 (30 minutes)*

**Presenter:** RODEJOHANN, Werner

**Session Classification:** Double Beta Decay

Contribution ID: 79

Type: **not specified**

## **Present status and future perspectives for neutrinoless double beta decay nuclear matrix elements with energy density functional methods**

*Monday 1 June 2015 15:00 (30 minutes)*

**Presenter:** RODRIGUEZ, Tomas

**Session Classification:** Double Beta Decay

Contribution ID: **80**

Type: **not specified**

## **Topological detection of double beta decay with NEMO-3 and SuperNEMO**

*Thursday 4 June 2015 15:00 (30 minutes)*

**Presenter:** SAAKYAN, Ruben

**Session Classification:** Double Beta Decay

Contribution ID: **81**

Type: **not specified**

## **The LUCIFER project - current status and perspectives**

*Monday 1 June 2015 18:40 (20 minutes)*

**Presenter:** SCHÄFFNER, Karoline

**Session Classification:** Neutrino Experiments, Methods and Facilities



Contribution ID: 82

Type: **not specified**

## **Staged implementation towards a large-scale $^{76}\text{Ge}$ neutrinoless double beta decay experiment**

*Thursday 4 June 2015 12:00 (30 minutes)*

**Presenter:** SCHÖNERT, Stefan

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 83

Type: **not specified**

## **Chiral effective field theory for dark matter direct detection**

*Tuesday 2 June 2015 14:30 (30 minutes)*

**Presenter:** SCHWENK, Achim

**Session Classification:** Dark Matter

Contribution ID: **84**

Type: **not specified**

## **Solar models and neutrinos: the standard model and beyond**

*Friday 5 June 2015 09:50 (30 minutes)*

**Presenter:** SERENELLI, Aldo

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: 85

Type: **not specified**

## **Nuclear weak processes in astrophysics studied with secondary particle beams**

*Monday 1 June 2015 15:30 (30 minutes)*

**Presenter:** SHIMA, Tatsushi

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: **86**

Type: **not specified**

## **The ADMX-HF experiment**

*Tuesday 2 June 2015 15:00 (30 minutes)*

**Presenter:** SHOKAIR, Timothy

**Session Classification:** Dark Matter

Contribution ID: 87

Type: **not specified**

## **Status of the Double Chooz experiment**

*Tuesday 2 June 2015 16:10 (20 minutes)*

**Presenter:** SIBILLE, Valerian

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: **88**

Type: **not specified**

## **Neutrinoless double beta decay with left and right-handed currents revisited**

*Thursday 4 June 2015 14:30 (30 minutes)*

**Presenter:** SIMKOVIC, Fedor

**Session Classification:** Double Beta Decay

Contribution ID: **89**

Type: **not specified**

## **The AMoRE experiment: A search for neutrinoless double beta decay of $^{100}\text{Mo}$**

*Wednesday 3 June 2015 17:00 (20 minutes)*

**Presenter:** SO, Jungho

**Session Classification:** Double Beta Decay



Contribution ID: **90**

Type: **not specified**

## **Spin responses in nuclear weak processes and nucleosynthesis**

*Tuesday 2 June 2015 10:30 (30 minutes)*

**Presenter:** SUZUKI, Toshio

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: **91**

Type: **not specified**

## **Recent results from XMASS**

*Thursday 4 June 2015 08:30 (30 minutes)*

**Presenter:** SUZUKI, Yoichiro

**Session Classification:** Dark Matter

Contribution ID: 92

Type: **not specified**

## **Nuclear response and gamma-emissivity studied by proton inelastic scattering**

*Wednesday 3 June 2015 15:30 (30 minutes)*

**Presenter:** TAMII, Atsushi

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 93

Type: **not specified**

## **Status and perspectives of the COBRA double beta decay experiment**

*Wednesday 3 June 2015 18:20 (20 minutes)*

**Presenter:** TEBRÜGGE, Jan

**Session Classification:** Double Beta Decay

Contribution ID: 94

Type: **not specified**

## **Variational study of the equation of state for hyperonic neutron stars**

*Wednesday 3 June 2015 17:30 (20 minutes)*

**Presenter:** TOGASHI, Hajime

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: 95

Type: **not specified**

## **Search for double beta processes in $^{106}\text{Cd}$ and $^{116}\text{Cd}$ with enriched $^{106}\text{CdWO}_4$ and $^{116}\text{CdWO}_4$ crystal scintillators**

*Monday 1 June 2015 17:00 (30 minutes)*

**Presenter:** TRETYAK, Vladimir

**Session Classification:** Neutrino Experiments, Methods and Facilities

Contribution ID: 96

Type: **not specified**

## **Double Gamow-Teller resonances –the other side of double beta decays**

*Wednesday 3 June 2015 16:30 (30 minutes)*

**Presenter:** UESAKA, Tomohiro

**Session Classification:** Double Beta Decay

Contribution ID: 97

Type: **not specified**

## **Self-interacting dark matter and a light scalar mediator**

**Presenter:** VASKONEN, Ville



Contribution ID: **98**

Type: **not specified**

## **Direct dark matter hunt**

*Thursday 4 June 2015 10:30 (30 minutes)*

**Presenter:** VERGADOS, Ioannis

**Session Classification:** Dark Matter

Contribution ID: 99

Type: **not specified**

## **Solar models and neutrinos: A quantitative analysis of the solar abundance problem**

*Friday 5 June 2015 10:20 (30 minutes)*

**Presenter:** VILLANTE, Francesco

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: **100**

Type: **not specified**

## **Formal and interdisciplinary aspects of neutrino flavour conversion in astrophysical environments**

*Tuesday 2 June 2015 10:00 (30 minutes)*

**Presenter:** VOLPE, Cristina

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: **101**

Type: **not specified**

## **Neutrino and dark matter physics with sub-keV Germanium detectors**

*Tuesday 2 June 2015 15:30 (30 minutes)*

**Presenter:** WONG, Henry T.

**Session Classification:** Dark Matter

Contribution ID: **102**

Type: **not specified**

## **On the role of eV-sterile neutrinos in core-collapse supernovae**

*Tuesday 2 June 2015 14:30 (30 minutes)*

**Presenter:** WU, Meng-Ru

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: **103**

Type: **not specified**

## **Experimental searches for eV-scale sterile neutrinos**

*Tuesday 2 June 2015 15:00 (30 minutes)*

**Presenter:** WURM, Michael

**Session Classification:** Supernova and Solar neutrinos, Neutrino Oscillations

Contribution ID: **104**

Type: **not specified**

## **Neutrino-nucleus scattering at supernova energies**

*Wednesday 3 June 2015 17:50 (20 minutes)*

**Presenter:** YDREFORS, Emanuel

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics

Contribution ID: **106**

Type: **not specified**

## **LBNO-DEMO (WA105): a large demonstrator of the liquid Argon double phase TPC**

*Wednesday 3 June 2015 18:10 (20 minutes)*

**Presenter:** LOO, Kai

**Session Classification:** Neutrinos in Nucleosynthesis and Astrophysics



Contribution ID: **107**

Type: **not specified**

## **Symposium photo**

*Monday 1 June 2015 10:50 (10 minutes)*

**Session Classification:** Symposium Photo

Contribution ID: **108**

Type: **not specified**

## **City Reception**

*Tuesday 2 June 2015 18:00 (1 hour)*

**Session Classification:** Reception at City Hall

Contribution ID: **109**

Type: **not specified**

## **Boat Cruise and Dinner**

*Thursday 4 June 2015 16:15 (5h 45m)*

**Session Classification:** Boat Cruise & Dinner

Contribution ID: **110**

Type: **not specified**

## **ANDES - The first deep underground laboratory of the southern hemisphere**

*Monday 1 June 2015 19:00 (30 minutes)*

**Presenter:** CIVITARESE, Osvaldo

**Session Classification:** Evening seminar session

Contribution ID: 111

Type: **not specified**

## **Natural radioactivity in the salt cavern of Polkowice-Sieroszowice copper mine**

*Monday 1 June 2015 19:30 (30 minutes)*

**Presenter:** POLACZEK-GRELIK, Kinga

**Session Classification:** Evening seminar session

Contribution ID: 112

Type: **not specified**

## **What is so special about the Pyhäsalmi mine?**

*Wednesday 3 June 2015 19:00 (30 minutes)*

**Presenter:** TRZASKA, Władysław

**Session Classification:** Evening seminar session