

Nu2022 Program (Tentative)

2022.04.08.

May 30 (M) – June 4th (Sat.), 2022

May 30th (M)

May 30 (M): 15:00 – 16:30 KST, 08:00-09:30 EU, 01:00-02:30 CDT, US

Poster Metaverse I-a

Long Break (4.5 hrs)

May 30 (M): 21:00 – 22:05 KST, 14:00-15:05 EU, 07:00-08:05 CDT, US

Opening session: 65 min

- Welcome 1 - 5 min Chung Wook Kim (KIAS)
- Welcome 2 - 5 min Tae Won Noh, KPS president (TBC)
- Welcome 3 - 5 min Do Young Noh, IBS president
- Introduction - 10 min Yeongduk Kim (IBS)
- Opening talk: the 50th Anniversary -- 35+5min Chris Quigg (Fermilab)

Short Break (10 min)

May 30 (M): 22:15 – 23:45 KST, 15:15-16:45 EU, 08:15-09:45 CDT, US

S1: Sterile Neutrino 1:

1. Overview of current sterile neutrino search and results & Global fit –35+5 min Joachim Kopp (Mainz & CERN)
2. Experimental results with reactors –27+3 min Matthieu Licciardi (LPSC, Grenoble)
3. NEOS-II new results – 18+2 min Jinyu Kim (IBS)

Long Break (6 hrs 15 min)

May 31st (Tu)

May 31 (Tu): 06:00 – 07:30 KST / 23:00-24:30 EU / 16:00-17:30 CDT, US

Poster Metaverse I-b

Long Break (1.5 hrs)

May 31 (Tu): 09:00 – 10:30 KST / 02:00-03:30 EU / 19:00-20:30 CDT, US

S2: Sterile Neutrino 2:

1. JSNS2 new results – 23+2 min TBD
2. MicroBooNE new results – 30+2min Hanyu Wei (LSU)
3. ICARUS + SBND – 15+2 min Anne Schukraft (Fermilab)
4. BEST – 15+2 min Steve Elliott (Washington)

Break (30 min)

May 31 (Tu): 11:00 – 12:30 KST / 04:00-05:30 EU / 21:00-22:30 CDT, US

S3: Sterile Neutrino 3:

1. Sterile neutrinos and other scenarios –27+3min Carlos Argüelles-Delgado (Harvard)

2. New results from keV sterile neutrino experiments –27+3 min **Kyle Leach (Colorado School of Mines)**

3. Future prospect on eV-scale sterile nu searches – 27+3 min **Daniel Winklehner (MIT) & Joshua Spitz (Michigan) joint talk**

Long Break (2.5 hrs)

May 31 (Tu): 15:00 – 16:30 KST / 08:00-09:30 EU / 01:00-02:30 CDT, US

Poster Metaverse II-a

Break (30 min)

May 31 (Tu): 17:00 – 18:30 KST / 10:00-11:30 EU / 03:00-04:30 CDT, US

S4: $0\nu\beta\beta$ I:

1. Overview of current experimental and theoretical status on $0\nu\beta\beta$ – 28+3 min **Fedor Šimkovic (Comenius Univ. & JINR)**

2. KamLAND-Zen – 15+2 min **Azusa Gando (Tohoku Univ.)**

3. CUORE – 15+2min **Laura Marini (GSSI & INFN-LNGS)**

4. CUPID, CUPID-0, CUPID-Mo – 24+2 min **Zolotarova Anastasiia (CEA)**

Long Break (3 hrs)

May 31 (Tu): 21:30 – 23:00 KST / 14:30-16:00 EU / 07:30-09:00 CDT, US

S5: $0\nu\beta\beta$ II:

1. AMoRE new results – 15+2 min **Yoomin Oh (IBS)**

2. NEXT (+ PandaX-III) – 15+2 min **Michel Sorel (Valencia Univ.)**

3. $0\nu\beta\beta$ search in Ge Detectors – 25+2 min **Julieta Gruszko (North Carolina Univ.)**

4. Perspectives of future $0\nu\beta\beta$ experiments – 27+3 min **Stefan Schönert (TUM)**

Long Break (7 hrs)

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----- **June 1st (W)** -----

June 1 (W): 06:00 – 07:30 KST, 23:00-24:30 EU, 16:00-17:30 CDT, US

Poster Metaverse II-b

Long Break (1.5 hrs)

June 1 (W): 09:00 – 10:30 KST / 02:00-03:30 EU / 19:00-20:30 CDT, US

S6: Reactor nu osc. 1:

1. Daya Bay – 23+2 min **Kam-Biu Luk (LBNL & UC-Berkeley)**

2. RENO – 23+2 min **Kyung Kwang Joo (Chonnam National Univ.)**

3. Riverview talk on reactor nu flux & shape (Exp.) –35+5 min **Nathaniel Bowden (LLNL, Livermore)**

Break (30 min)

June 1 (W): 11:00 – 12:30 KST / 04:00-05:30 EU / 21:00-22:30 CDT, US

S7: Reactor nu osc. 2:

1. JUNO –27+3 min **Jie Zhao (IHEP)**

2. Developments in reactor neutrino models (Theory) –27+3 min **Petr Vogel (Caltech)**

3. Reactor monitoring & NuTools and its application (AAP 2021 summary) – 27+3 min **Patrick Huber (Virginia Tech)**

Long Break (2.5 hrs)

June 1 (W): 15:00 – 16:30 KST / 08:00-09:30 EU / 01:00-02:30 CDT, US

Poster Metaverse II-b

Break (30 min)

June 1 (W): 17:00 – 18:30 KST / 10:00-11:30 EU / 03:00-04:30 CDT, US

S8: Nu mass:

1. Theoretical models on nu mass – 27+3 min **Ferruccio Feruglio (INFN-Padua & Padua Univ.)**
2. KATRIN new results - 25+2 min **Thierry Lassere (APC, Paris & IRFU, SPP, Saclay)**
3. ECHO-1k new results and HOLMES - 20+2 min **Loredana Gastaldo (Heidelberg Univ.)**
5. PTOLEMY -- 20+2 min **Marcello Messina (INFN-Gran Sasso)**

Long Break (3 hrs)

June 1 (W): 21:30 – 23:00 KST / 14:30-16:00 EU / 07:30-09:00 CDT, US

S9: Accelerator nu osc. 1:

1. 3 neutrino oscillation theory talk with global fit – 27+3 min **Thomas Schwetz (KIT)**
2. T2K – 27+3 min **TBD**
3. NOvA – 27+3 min **Jeff Hartnell (Sussex Univ.)**

Long Break (7 hrs)

June 2nd (Th)

June 2 (Th): 06:00 – 07:30 KST / 23:00-24:30 EU / 16:00-17:30 CDT, US

Poster Metaverse III-b

Long Break (1.5 hrs)

June 2 (Th): 09:00 – 10:30 KST / 02:00-03:30 EU / 19:00-20:30 CDT, US

S10: Accelerator nu osc. 2:

1. Flavor mixing, CP violation, and Unitarity (Theory) – 25+2 min **Peter Denton (BNL)**
2. Hyper-K – 20+2 min **Jeanne Wilson (King's College London)**
3. DUNE – 20+2 min **Mathew Muether (Wichita State Univ.)**
4. Reviews on neutrino fluxes (accel. nu) 18+2 min **Megan FRIEND (KEK)**

Break (30 min)

June 2 (Th): 11:00 – 12:30 KST / 04:00-05:30 EU / 21:00-22:30 CDT, US

S11: Accelerator nu osc. 3:

1. T2HK/KNO, ESSnuSB, and THEIA – 27+3min **Hyunsoo Kim (Sejong Univ.)**
2. HK & DUNE Synergy (Theory) – 27+3 min **Osamu Yasuda (Tokyo Metropolitan Univ.)**
3. NSI (Theory) – 27+3 min **Yasaman Farzan (IPM)**

Long Break (2.5 hrs)

June 2 (Th): 15:00 – 16:30 KST / 08:00-09:30 EU / 01:00-02:30 CDT, US

S12: Atmospheric Neutrinos:

1. SK & SK-GD – 23+2 min **Mark Vagins (IPMU-Tokyo & UC-Irvine)**
2. IceCube – 23+2 min **Tom Stuttard (Niels Bohr Institute)**
3. Reviews on neutrino fluxes (low E atm nu) – 18+2 min **Kazufumi Sato (Nagoya Univ.)**

3. Reviews on neutrino fluxes (high E atm nu) – 18+2 min **Anatoli Fedynitch (ICRR, Tokyo Univ.)**

Break (30 min)

June 2 (Th): 17:00 – 18:00 KST / 10:00-11:00 EU / 03:00-04:00 CDT, US

Public Talk: Takaaki Kajita (Tokyo Univ.)

Long Break (3.5 hrs)

June 2 (Th): 21:30 – 23:00 KST / 14:30-16:00 EU / 07:30-09:00 CDT, US

S13: Solar/DSNB Neutrinos:

1. Solar nu overview – (SK + Borexino + “SNO+”) – 27+3 min **Yusuke Koshio (Okayama Univ.)**

2. Borexino CNO new result w/ full data set – 27+3 min **Barbara Caccianiga (INFN-Milano)**

3. DSNB neutrino overview and new results – 27+3 min **Andrew Mastbaum (Rutgers Univ.)**

Long Break (7 hrs)

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----- **June 3rd (F)** -----

June 3 (F): 06:00 – 07:30 KST, 23:00-24:30 EU, 16:00-17:30 CDT, US

Poster Metaverse IV-b

Long Break (1.5 hrs)

June 3 (F): 09:00 – 10:30 KST / 02:00-03:30 EU / 19:00-20:30 CDT, US

S14: Astrophysical nu 1:

1. Multi-messenger astronomy – 27+3 min **Imre Bartos (Florida Univ.)**

2. Review of the searches for cosmic neutrinos – 27+3 min **Julia Tjus (Bochum Univ.)**

3. Neutrinos in supernova and dense medium (Theory) – 27+3 min **Meng-Ru Wu (Academia Sinica)**

Break (30 min)

June 3 (F): 11:00 – 12:30 KST / 04:00-05:30 EU / 21:00-22:30 CDT, US

S15: Astrophysical nu 2:

1. IceCube + Upgrade program – 27+3 min **Nahee Park (Queen's Univ., Canada)**

2. KM3Net – 27+3 min **Aart Heijboer (Nikhef, Netherlands)**

3. Baikal – 27+3 min **Zhan Djikibaev (INR, RAS)**

Long Break (2.5 hrs)

June 3 (F): 15:00 – 16:30 KST / 08:00-09:30 EU / 01:00-02:30 CDT, US

Poster Metaverse IV-a

Break (30 min)

June 3 (F): 17:00 – 18:30 KST / 10:00-11:30 EU / 03:00-04:30 CDT, US

S16: LHC Heavy Neutrino & R&D:

1. LHC heavy neutrino program – 24+2 min **Marta Ruspa (INFN-Torino)**

2. Overview on hybrid Cherenkov/scintillation detectors 20+2 min **Michael Wurm (Mainz Univ.)**

3. TBA - 20+2 min **Christian Buck (MPI-Heidelberg)**

4. reserve - 18+2 min TBD

Long Break (3 hrs)

June 3 (F): 21:30 – 23:00 KST / 14:30-16:00 EU / 07:30-09:00 CDT, US

S17: Nu Interaction I:

- 1.Theory of neutrino interactions –27+3 min **Natalie Jachowicz (Gent Univ.)**
2. Overview of recent neutrino cross section measurements –27+3 min **Laura FIELDS (Fermilab)**
3. Prospect on nu interactions in future nu oscillation experiments –27+3 min **Xianguo LU (Warwick Univ.)**
4. e4nu & CLAS: 15+2 min **Or Hen (MIT)**

Long Break (10 hrs)

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----- **June 4th (Sat)** -----

June 4 (Sat): 09:00 – 10:30 KST / 02:00-03:30 EU / 19:00-20:30 CDT, US

S18: Nu Interaction II:

- 1.Overview of current status and prospects on CEvNS (Exp.) –27+3 min **Carla Bonifazi (Rio de Janeiro Federal U.)**
2. COHERENT new results – 27+3 min **Daniel Pershey (Duke Univ.)**
3. New physics search w/ CEvNS (Theory) –27+3 min **Carlo Giunti (INFN-Torino)**
4. MicroBooNE x-section talk -- 15+2 min **Steven Gardiner (Fermilab)**

Break (30 min)

June 4 (Sat): 11:00 – 12:30 KST / 04:00-05:30 EU / 21:00-22:30 CDT, US

S19: New Neutrino Technologies II:

1. LAr TPC R&D - 20+2 min **Angela Fava (Fermilab)**
2. HK neutrino beam -- 16+2 min **Tetsuro Sekiguchi (KEK)**
3. DUNE neutrino beam --16+2 min **Mary Convery (Fermilab)**
4. Overview on emulsion detector technique --20+2 min **Toshiyuki Nakano (Nagoya Univ.) & Hiroki Rokujo joint talk (Nagoya Univ.)**
5. Project 8 new result - 18+2 min **Elise Novitski (Washington Univ.)**

Long Break (3.5 hrs)

June 4 (Sat): 16:00 – 17:30 KST / 09:00-10:30 EU / 02:00-03:30 CDT, US

S20: Neutrinos and Cosmology:

- 1.Nu mass & number constraints from cosmology – 27+3 min **Julien Lesgourgues (RWTH, Aachen)**
2. Neutrino physics with DM detector – 27+3 min **Tim Wolf (MPI-Heidelberg)**
3. Cosmological probes of non-standard neutrino scenarios – 27+3 min **Olga Mena (Valencia Univ)**

Long Break (2.5 hrs)

June 4 (Sat): 20:00 – 21:30 KST / 13:00-14:30 EU / 06:00-07:30 CDT, US

S21: BSM searches in neutrinos:

- 1.Overview talk (Theory) – 27+3 min **Pilar Coloma (Madrid Univ.)**
2. SHiP, SND, FASERnu, DsTau, SUBMET etc – 27+3 min **Antonia Di Crescenzo (Napoli) & Felix Kling (DESY) joint talk**
3. Proton decay – 27+3 min **Tommy Ohlsson (KTH)**

Break (30 min)

June 4 (Sat): 22:00 – 23:30 KST / 15:00-16:30 EU / 08:00-09:30 CDT, US

Closing session: 90 min

- Theoretical Outlook -- 30+5 min Silvia Pascoli (Bologna Univ.)
- Experimental Outlook -- 30+5 min Yifang Wang (IHEP)
- Closing remarks -- 10 min Sunny Seo (IBS)
- INC report -- 10 min Stephen Parke (Fermilab)

The END

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