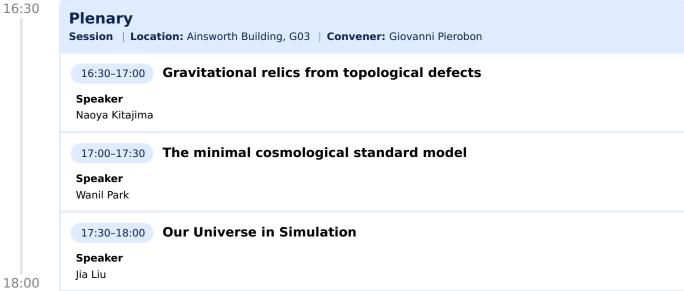


Monday 9 December

09:15 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Prof. Archil Kobakhidze 09:15-09:30 **Opening** 09:30-10:00 Lessons from the Seiberg-Witten axion Speaker Csaba Csaki 10:00-10:30 \$\theta\$-vacua, quantum gravity and particles spectrum Speaker Dr Otari Sakhelashvili 10:30 11:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Igor Samsonov 11:00-11:30 Classical Backgrounds as Coherent States and Canonical Quantization of General Relativity Speaker Lasha Berezhiani 11:30-12:00 Precision Low-Energy Experiments to Search for signs of Quantum Gravity and **Dark Matter Particles** Speaker Michael Tobar 12:00 14:00 Plenary Session | Location: Ainsworth Building, G03 | Convener: Prof. Alan Stanley Cornell 14:00-14:30 New results in axion physics Speaker Tony Gherghetta 14:30-15:00 Theoretical developments in flavor physics **Speaker** Wolfgang Altmannshofer 15:00-15:30 New developments in effective field theory Speaker Julie Pagès 15:30-16:00 Proton decay from the bottom up Speaker John Gargalionis 16:00

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Tuesday 10 December

09:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Csaba Balazs 09:00-09:30 **Saturons** Speaker Gia Dvali 09:30-10:00 Light dark matter detection Speaker Dr Peter Cox 10:00-10:30 Blazar-boosted dark matter: a cosmic accelerator for Sub-GeV dark matter particle detection Speaker Laura Manenti 10:30-10:31 Announcement - parallel sessions 10:31 11:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Aaron Vincent 11:00-11:30 Capture, Thermalization and Annihilation of Dark Matter in Neutron Stars Speaker Prof. Nicole Bell 11:30-12:00 Halo as a key to indirect DM searches Speaker Nagisa Hiroshima 12:00-12:30 Extreme energy cosmic rays: where do they all come from? Speaker Zurab Berezhiani 12:30

Wednesday 11 December

09:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Prof. Matthew Dolan 09:00-09:30 Cogenesis by Majoron Speaker Eung Jin Chun 09:30-10:00 Baryon Asymmetry of the Universe and New Physics Speaker Seyda Ipek 10:00-10:30 Calculating and Detecting Gravitational Waves from the Sound in Cosmological **Phase Transitions** Speaker Huaike Guo 10:30 11:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Ryuichiro Kitano 11:00-11:30 Axions beyond the QCD axion Speaker Stefania Gori 11:30-12:00 Axion-like particle at the LHC Speaker Kingman Cheung 12:00-12:30 muTRISTAN Speaker Ryutaro Matsudo 12:30-13:00 Neutrino flavor oscillations in supernovae Speaker Meng-Ru Wu

13:00

Thursday 12 December

09:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Narendra Sahu 09:00-09:30 Hyper-Kamiokande: Towards New Discoveries in (Astro)Particle Physics Patrick de Perio 09:30-10:00 Neutrino physics phenomenology Speaker Julia Gehrlein 10:00-10:30 Probing Seesaw Scale at a Cosmological Neutrino Collider Speaker Prof. Chengcheng Han 10:30 11:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Ameek Malhotra 11:00-11:30 Consequences of phase transitions occurred during inflation Speaker Haipeng An 11:30-12:00 Impacts of the ALP on dark photon searches Speaker Chuan-Ren Chen 12:00-12:30 Axion DM from Inflation-driven Quantum Phase Transition Speaker Seung J. Lee 12:30-12:31 Announcement 12:31 16:20 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Prof. Cheng-Wei Chiang 16:20-16:50 Gravitational Waves and Dark Matter in Gauged Two-Higgs Doublet Model Speaker tc yuan 16:50-17:20 Interplay between (g-2)_{e_a} anomalies and lepton flavor violating decays in models beyond the Standard Model with inverse seesaw neutrinos Speaker Tho Hue Le

17:20-17:50

Lessons from the by-gone anomalies: From Data to Models to Theories

Speaker

Prof. Pyungwon Ko

Friday 13 December

09:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Ciaran O'Hare 09:00-09:30 Weak supervision techniques in collider physics Speaker Prof. Cheng-Wei Chiang 09:30-10:00 Neutrino Mass and Mass Ordering with Cosmic Gravitational Focusing Speaker Prof. Shao-Feng Ge 10:00-10:30 False vacuum decay in and out of equilibrium Speaker Andrey Shkerin 10:30 11:00 **Plenary** Session | Location: Ainsworth Building, G03 | Convener: Dipan Sengupta 11:00-11:30 Unitarity, Causality, and Solar System Bounds, Significantly Limit Using **Gravitational Waves to Test General Relativity** Speaker Mark Hertzberg 11:30-12:30 Spin-2 Scattering Amplitudes and Gravitational Portal Dark Matter **Speakers** Elizabeth Simmons, R. Sekhar Chivukula 12:30-12:35 Closing remarks

12:45