

Saturday 8 November

08:50 **Regular Sessions: Welcome** Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208 09:00 09:00 Regular Sessions: First Morning Block Session Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208 09:00-09:15 Large Neutrino "Collider" Speaker Keping Xie 09:15-09:30 A \$\nu\$ look at the Sun: Probing the conditions of the solar core using \$^8\$B neutrinos Speaker Ms Melanie Zaidel 09:30-09:45 Probing Neutrino Properties at Low and Medium Energies **Speaker** Sam Carey 09:45-10:00 A Quantum Computational Determination of the Weak Mixing Angle in the **Standard Model** Speaker Qiaofeng Liu 10:00 10:15 Regular Sessions: Second Morning Block Session Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208 10:15-10:30 A Quantum Description of Axion Dark Matter Detection Speaker **Dhong Yeon Cheong** 10:30-10:45 Axion Production and Detection Using a Dual NMR-type Experiment Speaker Fengwei Yang 10:45-11:00 Upper Bound on Parity Breaking Scale for Doublet WIMP Dark Matter Speaker Matthew Baldwin 11:00-11:15 Stringent Constraints on Gravitational Wave Signatures of Dark Electromagnetism

Speaker Ian Harris 11:15 14:05 Regular Sessions: APS Announcement Session Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208 14:10 15:15 Regular Sessions: First Afternoon Block Session Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208 15:15-15:30 Running with Radiative Corrections in Deep Inelastic Scattering Speaker Justin Cammarota 15:30-15:45 A baryon and lepton number violation model testable at the LHC **Speaker** Tong Ou 15:45-16:00 Autonomous New-Physics Discovery from Foundational Embeddings of SMEFT Speaker Brandon Kriesten 16:00-16:15 QED at the precision frontier: accounting for cavity shifts to \$(g-2)_e\$ Speaker Hannah Day 16:15 16:30 Regular Sessions: Second Afternoon Block Session Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208 16:30-16:45 Constraining General Light Massive Relics with the CMB Speaker David Imig 16:45-17:00 AXIS Can Access Dark Matter Decays with the Longest Lifetimes Speaker Inci Karaaslan 17:00-17:15 Dynamical Solution to the Eta Problem in Spectator Field Models Speaker Sana Elgamal 17:15-17:30 Generalized Entanglement Measures in Higher Dimensional Quantum Systems

17:30

Speaker Melinda Yuan 17:35

Regular Sessions: Evening Block

Session

Location: Northwestern University Technological Institute, Tech L211, 2145 Sheridan Rd, Evanston, IL 60208

17:35-17:50

Searching Stochastic Gravitational Wave Background Landscape From Inflated **String-Wall Network Across Frequency Bands**

Speaker

Yunjia Bao

17:50-18:05

Constraining the Coexistence of Freeze-in Dark Matter and Primordial Black Holes

Sagnik Mukherjee

18:05-18:20 The Bearable Inhomogeneity of the Baryon Asymmetry

Speaker

Hengameh Bagherian

18:35