

Physics

Session **X**

Room: 113 Spalding

10:00 - 10:20 AM	Daniel E. Sotolongo <i>Bob and Carole Chapman Minority SURF Fellow</i>	Construction and Testing of Low-Energy α - and β -Particle- Tracking Detector Prototype	Sunil Golwala <i>Professor of Physics</i> Robert H. Nelson <i>Postdoctoral Scholar in Physics</i>
10:20 - 10:40 AM	Joon Ho Lee	Pattern Formation With Two-Dimensional Array of Trapped Ions	Michael C. Cross <i>Professor of Theoretical Physics</i>
10:40 - 11:00 AM	James M. Scott <i>Jean J. Dixon SURF Fellow</i>	Analysis of Energy Estimation From NOvA Detector Data	Ryan B. Patterson <i>Assistant Professor of Physics</i>
11:00 - 11:20 AM	Shiyu Zhao <i>Richter Scholar</i>	Crowdsourcing for Event Classification in NOvA Particle Physics Experiment	Ryan B. Patterson <i>Assistant Professor of Physics</i>
11:20 - 11:40 AM	Chen Gong	Thermometry of He ³ Fridge	Keith C. Schwab <i>Professor of Applied Physics</i>
11:45 AM - 1:00 PM	LUNCH		
1:00 - 1:20 PM	Lauren A. Gilbert	Barium Tagging for the Enriched Xenon Observatory	Martin Breidenbach <i>Professor, SLAC Particle Physics and Astrophysics, SLAC National Accelerator Laboratory</i> Liang Yang <i>Research Associate, SLAC National Accelerator Laboratory</i> Maria Spiropulu <i>Associate Professor of Physics</i>
1:20 - 1:40 PM	Joshua Yoon <i>The Aerospace Corporation SURF Fellow</i>	Analysis of the Electrical Characteristics of Micro- Superconducting QUantum Interference Devices (μ -SQUIDS) Fabricated Under a Trilayer Nb-AIO _x -Nb Process	Kathryn Moler <i>Professor of Applied Physics and Physics, Stanford University</i> Keith C. Schwab <i>Professor of Applied Physics</i>
1:40 - 2:00 PM	Samuel G. Goldberg <i>Rose Hills Foundation SURF Fellow</i>	Coherence of Majorana Qubit in a Topological Superconducting Wire Undergoing a Phase Slip Event	Gil Refael <i>Professor of Theoretical Physics</i> Doron Bergman <i>Sherman Fairchild Postdoctoral Scholar in Theoretical Science</i>
2:00 - 2:20 PM	Nina B. Budaeva <i>David L. Goodstein SURF Fellow</i>	Chemical Effects of Ice Crystal Growth	Kenneth G. Libbrecht <i>Professor of Physics</i>

2:20 - 2:30 PM	BREAK		
2:30 - 2:50 PM	Mohit Tiwari	Pauli-Based Local Commuting Projector Codes	John P. Preskill <i>Richard P. Feynman Professor of Theoretical Physics</i> Jeongwan Haah <i>Graduate Student in Physics</i>
2:50 - 3:10 PM	Travis L. Scholten <i>Robert L. Blinkenberg SURF Fellow</i>	Spectral Gap Scaling of One Dimensional Quantum Spin Chains	John P. Preskill <i>Richard P. Feynman Professor of Theoretical Physics</i> Spyridon Michalakis <i>Postdoctoral Scholar in Theoretical Physics</i>
3:10 - 3:30 PM	Matthew T. Heydeman <i>Victor Neher SURF Fellow</i>	Spectral Gap Scaling of One Dimensional Quantum Spin Chains	John P. Preskill <i>Richard P. Feynman Professor of Theoretical Physics</i> Spyridon Michalakis <i>Postdoctoral Scholar in Theoretical Physics</i>
3:30 - 3:50 PM	Peter D. Koch <i>Class of '52 SURF Fellow</i>	The Role of Elastic Interactions in Bacterial Chemoreceptor Organization and Function	Rob B. Phillips <i>Professor of Applied Physics and Mechanical Engineering</i> Christoph A. Haselwandter <i>Postdoctoral Scholar in Applied Physics</i>