

Mathematics and Physics

Session **N**

Room: 224 Jorgensen

1:00 - 1:20 PM	Akshar D. Ramkumar	Reducibility and hardness of random quantum stabilizer codes	Vinod Vaikuntanathan <i>Ford Foundation Professor of Engineering, Massachusetts Institute of Technology</i> Hsin-Yuan (Robert) Huang <i>Assistant Professor of Theoretical Physics</i>
1:20 - 1:40 PM	Guanxi Li <i>Karen Roberts and Jim Sagawa SURF Fellow</i>	Fulton's intersection theory of Matroid	Paolo Aluffi <i>Visiting Professor in Mathematics</i>
1:40 - 2:00 PM	Samuel J. Moss	Hodge-refined Whitehead torsion for algebraic deformations	Aravind Asok <i>Professor of Mathematics, University of Southern California</i> Tom B. Graber <i>Professor of Mathematics</i>
2:00 - 2:20 PM	Tisya C. Rawat	The Gaussian curvature of superminimal immersions in the round 4-sphere	Riccardo Caniato <i>Olga Taussky and John Todd Postdoctoral Scholar Teaching Fellow in Mathematics</i>
2:20 - 2:40 PM	Eduardo H. Rodrigues do Nascimento	Irrationality proofs by arithmetic holonomy bounds	Vesselin A. Dimitrov <i>Professor of Mathematics</i>
2:40 - 3:00 PM	Justin D. Lee <i>Northern California Associates SURF Fellow</i>	On the absolute prismatic cohomology of number rings	Matthias Flach <i>Professor of Mathematics</i>
3:00 - 3:10 PM	BREAK		
3:10 - 3:30 PM	Maverick S. McKown <i>John and Barbara Gee SURF Fellow</i>	Modeling and shielding of mobile electron beam for increased asphalt durability	Maria Spiropulu <i>Shang-Yi Ch'en Professor of Physics</i> Adi Bornheim <i>Research Scientist in High Energy Physics</i> Christopher J. Edwards <i>Project Engineer, Fermilab</i>

3:30 - 3:50 PM	<i>Damian R. Musk</i>	Quantum chaos and black holes in $N = 2$ SYK and D1-D5-P	Joseph D. Lykken <i>Deputy Director of Research, CERN</i> Kyriakos Papadodimas <i>Researcher in Theoretical Physics, CERN</i> Maria Spiropulu <i>Shang-Yi Ch'en Professor of Physics</i>
3:50 - 4:10 PM	<i>Jiahui Xie</i>	Investigating and improving Z-boson mass resolution for Higgs decay to dimuon searches	Maria Spiropulu <i>Shang-Yi Ch'en Professor of Physics</i> Si Xie <i>Visitor in High Energy Physics</i> Cristian Peña <i>Associate Scientist in Physics, CERN</i> Christina Wang <i>Lederman Fellow in Physics, Fermilab</i>
4:10 - 4:30 PM	<i>Tuyen T. Nguyen</i>	Improving Higgs boson decay classification into tau leptons via fine tuning of the particle transformer	Maria Spiropulu <i>Shang-Yi Ch'en Professor of Physics</i> Jennifer Ngadiuba <i>Researcher in Particle Physics</i> Raghav Kansal <i>Researcher, CERN</i>
4:30 - 4:50 PM	<i>Sophia M. Adams</i> <i>Mellon Mays SURF Fellow</i>	Bootstrapping methods for matrix quantum mechanics and quantum field theory	Xi Yin <i>Professor of Physics, Harvard University</i> Joshua Sandor <i>Research Scientist in Chemistry and Chemical Engineering, Harvard University</i> David Simmons-Duffin <i>Professor of Theoretical Physics</i>
4:50 - 5:10 PM	<i>Abhiram Cherukupalli</i> <i>Margaret Leong and Michael P. Checca SURF Fellow</i>	Probing correlated dark matter signals in pulsar timing arrays might lead to promising bounds on substructure	Kathryn M. Zurek <i>Louis E. Nohl Professor of Theoretical Physics</i> Kim V. Berghaus <i>Sherman Fairchild Postdoctoral Scholar Research Associate in Theoretical Physics</i> Vincent Lee <i>Postdoctoral Scholar in Physics</i>