Caltech
Student-Faculty Programs

Physics

Session T

Room: **103 Downs**

1:00 - 1:20 PM	***Mikhail Mints*** *Arthur R. Adams SURF Fellow*	Fragmentation Is Efficiently Learnable by Quantum Neural Networks	John P. Preskill *Richard P. Feynman Professor of Theoretical Physics* Eric R. Anschuetz *Sherman Fairchild Postdoctoral Scholar Research Associate in Theoretical Physics*
1:20 - 1:40 PM	***Yuvan Anand*** *Ernest R. Roberts SURF Fellow*	Observable-projected Ensembles	John P. Preskill *Richard P. Feynman Professor of Theoretical Physics* Alexey Milekhin *IQIM Postdoctoral Scholar Research Associate in Theoretical Physics* Sara Murciano
1:40 - 2:00 PM	***Charvi Goyal*** *Larson Scholar*	A Quasi-polynomial-time Classical Algorithm for Lindbladian Evolution	John P. Preskill *Richard P. Feynman Professor of Theoretical Physics* Thomas Schuster *Sherman Fairchild Postdoctoral Scholar Research Associate in Theoretical Physics*
2:00 - 2:20 PM	***Arul R. Mazumder*** Carnegie Mellon University	Early Fault-Tolerant Quantum Algorithms for Matrix Functions via Trotter Extrapolation	John P. Preskill *Richard P. Feynman Professor of Theoretical Physics* Samson Wang *IQIM Postdoctoral Scholar Research Associate in Theoretical Physics*
2:20 - 2:40 PM	***Christine Li*** Columbia University	Universal High-rate Quantum Fault-tolerance via Transversal Dimension Jumping	John P. Preskill *Richard P. Feynman Professor of Theoretical Physics* Qian Xu *Sherman Fairchild Postdoctoral Scholar Research Associate in Theoretical Physics*
2:40 - 2:50 PM	***BREAK***		

2:50 - 3:10 PM	***Thomas E. Eyres*** University of Cambridge *Caltech-Cambridge Exchange*	A Novel Application of a Frequency Tracking Technique to Nanomechanical Resonators for Mass Sensing	Michael L. Roukes *Frank J. Roshek Professor of Physics, Applied Physics, and Bioengineering* Mert Yuksel *Graduate Student in Applied Physics*
3:10 - 3:30 PM	***Suvinay Goyal*** University of Illinois at Urbana-Champaign	Commissioning a 100 mK ADR Cryostat for CMB and Line-Intensity Mapping Applications	James J. Bock *Marvin L. Goldberger Professor of Physics; Senior Research Scientist, JPL* Kenny Lau *Postdoctoral Scholar Research Associate in Physics*
3:30 - 3:50 PM	***Dallin E. Soukup*** *Dr. Alan Weinstein SURF Fellow*	Evaluating the Feasibility of External Tracers of Aurora Contamination in SPHEREx Data	James J. Bock *Marvin L. Goldberger Professor of Physics; Senior Research Scientist, JPL* Chi Nguyen *Postdoctoral Scholar Research Associate in Physics*
3:50 - 4:10 PM	***Aura H. Gamez*** Pasadena City College *Carl F. Braun WAVE Fellow*	Characterizing the Intrinsic Three Dimensionality of CHEX-MATE Galaxy Clusters Using the Sunyaev-Zel'dovich Effect	Jack Sayers *Research Professor of Physics* Adriana Gavidia *Graduate Student in Physics*
4:10 - 4:30 PM	***Waly M Z Karim*** University of Rochester	Searching for Pulsation in Low Mass Stars Using Supervised Learning Techniques	James W. Fuller *Assistant Professor of Theoretical Astrophysics* Rocio Kiman *Sherman Fairchild Postdoctoral Scholar Research Associate in Astronomy*