

Mathematics/Applied and Computational Mathematics

Session **T**

Room: 111 Keck

10:00 - 10:20 AM	Alexandra M. Musat	Generalized Iterated Function Systems	Radu Miculescu <i>Associate Professor of Mathematics, Bucharest University</i> Danny C. Calegari <i>Richard Merkin Distinguished Professor of Mathematics</i>
10:20 - 10:40 AM	Casey Jao <i>Richter Scholar</i>	On Free Groups Generated by Two Parabolic Elements of $SL(2, \mathbb{Q})$	Danny C. Calegari <i>Richard Merkin Distinguished Professor of Mathematics</i> Matthew B. Day <i>Postdoctoral Scholar in Mathematics</i>
10:40 - 11:00 AM	Michael T. Smith	Analogues of the Curve Complex	Danny C. Calegari <i>Richard Merkin Distinguished Professor of Mathematics</i> Matthew B. Day <i>Postdoctoral Scholar in Mathematics</i>
11:00 - 11:20 AM	Zarathustra E. Brady <i>Richter Scholar</i>	Searching for Multigrades	Matthias Flach <i>Professor of Mathematics</i>
11:20 - 11:40 AM	Ben B. McMillan <i>Bob and Carole Chapman Minority SURF Fellow</i>	Stochastic Loewner Evolutions and the Ginibre-Girko Ensemble	Nikolai Makarov <i>Professor of Mathematics</i>
11:40 AM - 1:00 PM	LUNCH		
1:00 - 1:20 PM	Domenic A. Denicola <i>Richter Scholar</i>	Noncommutative Geometry Techniques Applied to Quantum Gravity	Matilde Marcolli <i>Professor of Mathematics</i>
1:20 - 1:40 PM	Daniel W. Kolodrubetz <i>Richter Scholar</i>	Numerical Approximations to Renormalization Group Equations for Standard Model With Neutrino Mixing	Matilde Marcolli <i>Professor of Mathematics</i>
1:40 - 2:00 PM	Ana S. Balibanu <i>Richter Scholar</i>	Infinite Walks on the Primes of Integer Lattices	Dinakar Ramakrishnan <i>Taussky-Todd-Lonergan Professor of Mathematics</i>

2:00 - 2:20 PM	Gjergji Zaimi	On Some Inequalities Involving Schur Polynomials and Other Symmetric Functions	Paul D. Nelson <i>Graduate Student in Mathematics</i> Richard M. Wilson <i>Professor of Mathematics</i>
2:20 - 2:30 PM	BREAK		
2:30 - 2:50 PM	Christopher A. Wong	New Approaches to Computing the Spectra and Pseudospectra of Hermitian and Non-Hermitian Schrödinger Operators	Anders C. Hansen <i>von Kármán Instructor of Applied and Computational Mathematics</i>
2:50 - 3:10 PM	Ryan A. Denlinger <i>The Aerospace Corporation</i> <i>SURF Fellow</i>	Reflectarray Design With Rigorous Scattering Solvers and Integral Equations	Oscar P. Bruno <i>Professor of Applied and Computational Mathematics</i> Timothy J. Elling <i>Staff Scientist in Applied and Computational Mathematics</i>
3:10 - 3:30 PM	Asif R. Khan	Parallelization of Secondary Structure Prediction Algorithms for Nucleic Acid Sequences	Niles A. Pierce <i>Associate Professor of Applied and Computational Mathematics and Bioengineering</i> Joseph Zadeh <i>Graduate Student in Bioengineering</i>
3:30 - 3:50 PM	Anton M. Bongio Karrman <i>Northern California Associates</i> <i>SURF Fellow</i>	Structural Optimization Using Sensitivity Analysis and a Level Set Method	Gregoire Allaire <i>Professor of Applied Mathematics, École Polytechnique</i> Dan I. Meiron <i>Professor of Applied and Computational Mathematics and Computer Science</i>