

Mathematics

Session **S**

Room: 102 Spalding Lab

1:00 - 1:20 PM	Elliot D. Steffen University of Indianapolis Southern California Edison WAVE Fellow	Developing improved computational algorithms for the stable Andrews-Curtis conjecture	Sergei G. Gukov <i>John D. MacArthur Professor of Theoretical Physics and Mathematics</i>
1:20 - 1:40 PM	Avigya Paudel Union College	Change of variables and difficulty measures for stable Andrews-Curtis search	Sergei G. Gukov <i>John D. MacArthur Professor of Theoretical Physics and Mathematics</i> Michele Tarquini <i>Graduate Student in Physics</i> Lucas Fagan <i>Research Scientist in Mathematics</i>
1:40 - 2:20 PM (joint presentation)	Weibing Guo University of Illinois Urbana-Champaign	Computing F_K invariants of Montesinos knots via quantum 3j- and 6j-symbols	Sergei G. Gukov <i>John D. MacArthur Professor of Theoretical Physics and Mathematics</i>
1:40 - 2:20 PM (joint presentation)	Minghao Ji Columbia University VURP Fellow	Q-series invariants of hyperbolic 3-manifolds and their relation to logarithmic vertex operator algebras	Sergei G. Gukov <i>John D. MacArthur Professor of Theoretical Physics and Mathematics</i>
2:20 - 2:40 PM	Henry Gustafson Caltech Joanna Wall Muir SURF Fellow	Positroid stratifications of positive symplectic Grassmannians	Yassine El Maazouz <i>Harry Bateman Postdoctoral Scholar Teaching Fellow in Mathematics</i>
2:40 - 2:50 PM	BREAK		
2:50 - 3:10 PM	Chenning Xu Caltech Ryser SURF Fellow	Tracial joint spectral measure for nearly commuting matrices	Otte Heinaevaara <i>Scott Russell Johnson Postdoctoral Scholar Teaching Fellow in Mathematics</i>
3:10 - 3:30 PM	Enoch J. Guo Caltech Hannah Bradley SURF Fellow	Infinitely many primes of basic reduction for some abelian sixfolds	Elena Mantovan <i>Taussky-Todd-Lonergan Professor of Mathematics</i>
3:30 - 3:50 PM	Alyna X. Tang Caltech Olga Taussky-Todd SURF Fellow	Formal languages and aperiodic spin chains on the boundaries of hyperbolic tilings	Matilde Marcolli <i>Robert F. Christy Professor of Mathematics and Computing and Mathematical Sciences</i>

3:50 - 4:10 PM	<i>Caleb Pascale</i> Massachusetts Institute of Technology	Quantifying Gaussian decompositions of subgaussian random vectors and towards the convexity conjecture for solid sets	Antoine Song <i>Professor of Mathematics</i>
4:10 - 4:30 PM	<i>Lizzie V. Teryoshin</i> University of California, San Diego <i>Carl F. Braun WAVE Fellow</i>	The Schauder fixed point property for countable amenable groups	Omer Tamuz <i>Professor of Economics and Mathematics</i>
4:30 - 4:50 PM	<i>Michelle Holland</i> University of California, Berkeley <i>Carl F. Braun WAVE Fellow</i>	Characterizing Andrews-Gordon summands in terms of subsets of cylindric partitions	Tony Yue Yu <i>Professor of Mathematics</i> Weihong Xu <i>Harry Bateman Postdoctoral Scholar Teaching Fellow in Mathematics</i> Yifeng Huang