

Mathematics Session O

| Room:          | 109 Jorgensen  |  |   |
|----------------|--|--|---|
| 1:00 - 1:20 PM | Toby J. Saunders-A'Court<br>The Associates SURF Fellow             | Distributional exploration bonuses   | Sergei G. Gukov John D. MacArthur Professor of Theoretical Physics and Mathematics Muhammad A. Shehper Research Scientist in Mathematics  |
| 1:20 - 1:40 PM | <b>John G. Mattson</b><br>Carl F. Braun SURF Fellow                | Multivariable matrix monotone functions  | Otte Heinaevaara<br>Scott Russell Johnson<br>Postdoctoral Scholar Teaching<br>Fellow in Mathematics   |
| 1:40 - 2:00 PM | <b>Jun Ikeda</b><br>Dale and Suzanne Burger<br>SURF Fellow         | Generalized tube algebras for locally presented quasi-local algebras   | Corey Jones Assistant Professor of Mathematics, North Carolina State University Matilde Marcolli Robert F. Christy Professor of Mathematics and Computing and Mathematical Sciences |
| 2:00 - 2:20 PM | Samuel P. Goodman<br>Nilo A. and Phylis F. Niccolai<br>SURF Fellow | Unitary Eichler basis theorems   | Elena Mantovan<br>Taussky-Todd-Lonergan Professor<br>of Mathematics   |
| 2:20 - 2:40 PM | <b>Grace H. To</b><br>Joanna Wall Muir SURF Fellow                 | Analyzing the asymptotic behavior of the integrality gap for the Goemans-Linial SDP relaxation of the Uniform Sparsest Cut                         | Seung-Yeon Ryoo<br>Olga Taussky and John Todd<br>Postdoctoral Scholar Teaching<br>Fellow in Mathematics   |
| 2:40 - 3:00 PM | <b>Henry Gustafson</b><br>Carl F. Braun SURF Fellow                | Algebraic models of Merge and phases for tensor networks   | Matilde Marcolli<br>Robert F. Christy Professor of<br>Mathematics and Computing and<br>Mathematical Sciences  |
| 3:00 - 3:10 PM | BREAK  |  |   |
| 3:10 - 3:30 PM | Colin H. La  | Cutoff window for the Gibbs sampler process  | Lingfu Zhang<br>Assistant Professor of<br>Mathematics   |
| 3:30 - 3:50 PM | Piash Mondol   | Upper bounds on the optimal pebbling number of graphs with high minimum degree   | Matthew M. Gherman<br>Hearst Postdoctoral Scholar<br>Teaching Fellow in Mathematics   |
| 3:50 - 4:10 PM | Vivian Loh<br>Samuel P. and Frances Krown<br>SURF Fellow           | The negligible ideals of some symmetric groups, and its application to the Krull dimension of the integral negligible quotient of any finite group | Matthew M. Gherman<br>Hearst Postdoctoral Scholar<br>Teaching Fellow in Mathematics   |