

Physics from the Point of View of Geometry
29-30 September 2022
L1

Schedule

Wednesday, 28 September – Clay Research Conference

- 10:00-11:00 Bhargav Bhatt, *Vanishing theorems in algebraic geometry*
11:00-11:30 Coffee
11:30-12:30 Kevin Costello, *Scattering amplitudes and vertex algebras*
12:30-14:00 Lunch
14:00-15:00 Igor Rodnianski, *(some) Things you always wanted to know about Mathematical General Relativity (but were too afraid to ask)*
15:00-15:30 Coffee
15:30-16:30 Jacob Tsimerman, *The André—Grothendieck Period conjecture over function fields*
16:30-17:30 Peter Scholze, *The work of Bhargav Bhatt*
Ulrike Tillmann, *The work of Søren Galatius and Oscar Randal-Williams*
Presentation of the 2021 and 2022 Clay Research Awards
17:30-19:00 Reception in the Mathematical Institute

Thursday, 29 September

- 10:00-11:00 Dan Freed, *A time-reversal anomaly, bordism, and index theory*
11:00-11:30 Coffee
11:30-12:30 Claudia Scheimbauer, *A universal property of the higher category of spans and finite gauge theory as an extended TFT*
12:30-14:30 Lunch
14:30-15:30 Søren Galatius, *Equivariant bordism categories and their classifying spaces*
15:30-16:00 Coffee
16:00-17:00 Maxim Kontsevich, *Semi-infinite topology of Chern-Simons theory*

Friday, 30 September

- 10:00-11:00 Oscar Randal-Williams, *Algebraic independence of topological Pontrjagin classes*
11:00-11:30 Coffee
11:30-12:30 Constantin Teleman
12:30-14:30 Lunch
14:30-15:30 David Ben-Zvi, *Higher geometric quantization and L-functions*
15:30-16:00 Coffee
16:00-17:00 Mike Hopkins, *The motivic Freudenthal suspension theorem*
19:00 Drinks reception, Merton College
19:30 Dinner, Merton College