

**Harmonic Analysis and Related Areas
September 24 – 28, 2017**

Schedule

Sunday, September 24 – L6

- 10:30-11:00 Registration
11:00-12:00 Nalini Anantharaman, *Quantum ergodicity on graphs: spectral and spatial delocalization* (joint with Ergodic Theory, L3)
12:00-13:30 Lunch
13:30-14:30 Ciprian Demeter, *Decoupling beyond uniform sets*
15:00-16:00 Josh Zahl, *Breaking the $3/2$ barrier for unit distances in three dimensions*
16:00-16:30 Coffee

Monday, September 25 – L3

- 10:30-11:00 Coffee
11:00-12:00 Tom Sanders, *The cost of commuting*
12:00-13:30 Lunch
13:30-14:30 Ben Green, *The arithmetic Kakeya conjecture of Katz and Tao*
15:00-16:00 Trevor Wooley, *Nested Efficient Congruencing and relatives of Vinogradov's mean value theorem*
16:00-16:30 Coffee

Tuesday, September 26 – L3

- 9:30-10:30 Izabella Laba, *Lower bounds for the maximal directional Hilbert transform*
10:30-11:00 Coffee
11:00-12:00 Chris Sogge, *On the concentration of eigenfunctions*
12:00-13:30 Lunch
13:30-14:30 Elon Lindenstrauss, *Bourgain's discretized projection theorem, revisited*
15:00-16:00 Stefanie Petermichl, *Higher order Journé commutators*
16:00-16:30 Coffee

Wednesday, September 27 – Clay Research Conference – L1

- 10:00-11:00 Larry Guth, *Introduction to decoupling*
11:00-11:30 Coffee
11:30-12:30 Bertrand Toën, *Algebraic geometry, categories and trace formulas*
12:30-14:00 Lunch
14:00-15:00 Ovidiu Savin, *From second order equations to nonlocal PDEs*
15:00-15:30 Coffee
15:30-16:30 Tamar Ziegler, *Dynamics, arithmetic progressions and approximate cohomology*
16:30-17:30 Presentation of the 2017 Clay Research Awards
17:30-19:00 Reception in the Mathematical Institute

Thursday, September 28 – L3

- 10:00-10:30 Coffee
10:30-11:30 Jonathan Bennett, *Perturbed Brascamp–Lieb inequalities*
11:30-13:30 Lunch

13:30-14:30 Polona Durcik, *Entangled multilinear forms and applications*
15:00-16:00 Christoph Thiele, *Some results on directional operators*
16:00-16:30 Coffee