

**O-minimality and Diophantine Geometry**  
**26-30 September 2022**  
**L3**

**Schedule**

**Monday, 26 September**

- 9:30-10:30 Umberto Zannier, *Infinite orbits in elliptic surfaces, Ax Schanuel and ramification in the Legendre family*
- 10:30-11:00 Coffee
- 11:00-12:00 Ziyang Gao, *Torsion points in families of abelian varieties*
- 12:00-14:30 Lunch
- 14:30-15:30 Gal Binyamini, *Sharp o-minimality*
- 15:30-16:00 Coffee
- 16:00-17:00 Harry Schmidt, *Effective isogeny estimates along families of abelian varieties*

**Tuesday, 27 September**

- 9:30-10:30 Annette Huber, *Exponential periods and o-minimality*
- 10:30-11:00 Coffee
- 11:00-12:00 Laura Capuano, *GCD results on semiabelian varieties and a conjecture of Silverman*
- 12:00-14:30 Lunch
- 14:30-15:30 David Masser, *Some new elliptic integrals*
- 15:30-16:00 Coffee
- 16:00-17:00 Marta Pieropan, *The split torsor method for Manin's conjecture*

**Wednesday, 28 September – Clay Research Conference, L1**

- 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**

- 9:30-10:30 Gabriel Dill, *Arithmetic unlikely intersections in split semiabelian varieties*
- 10:30-11:00 Coffee
- 11:00-12:00 Alina Ostafe, *Integer matrices with a given characteristic polynomial and multiplicative dependence of matrices*
- 12:00-14:30 Lunch
- 14:30-15:30 Philipp Habegger, *Some cases of the Schinzel-Zassenhaus Conjecture in Arithmetic Dynamics*
- 15:03-16:00 Coffee

16:00-17:00 Jonathan Pila, *Primitives of algebraic functions*

**Friday, 30 September**

9:30-10:30 Tom Scanlon, *Likely intersections*

10:30-11:00 Coffee

11:00-12:00 Kobi Peterzil, *The Hausdorff limit of images of definable sets in the torus*

12:00-14:30 Lunch

14:30-15:30 Margaret Thomas, *Effective Pila--Wilkie bounds for Pfaffian sets and some diophantine applications*

15:30-16:00 Coffee

16:00-17:00 Jacob Tsimerman