

**Nonlocal PDEs**  
**September 25 – 29, 2017**

**Schedule**

**Monday, September 25, L4**

- 9:00-9:30 Registration  
9:30-10:30 Xavier Cabre, *Nonlocal minimal cones and surfaces with constant nonlocal mean curvature*  
10:30-11:00 Coffee  
11:00-12:00 Cyril Imbert, *The weak Harnack inequality of the Boltzmann equation without cut-off*  
12:00-14:00 Lunch  
14:00-15:00 Dennis Kriventsov, *Regularity in time for fully nonlinear, nonlocal (and local) parabolic equations*  
15:00-15:30 Coffee  
15:30-16:30 Jean-Michel Roquejoffre, *Front propagation driven by a line of fast diffusion: a property of the level sets*

**Tuesday, September 26, L4**

- 9:30-10:30 Juan Luis Vazquez, *Nonlinear fractional diffusion, from older to recent work*  
10:30-11:00 Coffee  
11:00-12:00 Joaquim Serra, *The De Giorgi conjecture for the half-Laplacian in dimension 4*  
12:00-14:00 Lunch  
14:00-15:00 Yannick Sire, *Asymptotic limits for the fractional Allen-Cahn equation and stationary nonlocal minimal surfaces*  
15:00-15:30 Coffee  
15:30-16:30 Jun-cheng Wei, *Counter-examples to De Giorgi Conjecture for Fractional Allen-Cahn*

**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, L4**

- 9:30-10:30 Moritz Kassmann, *Nonlocal energy forms and function spaces*  
10:30-11:00 Coffee  
11:00-12:00 Alexis Vasseur, *Regularity theory for non local in time operators*  
12:00-14:00 Lunch  
14:00-15:00 Tianling Jin, *On the isoperimetric quotient over scalar-flat conformal classes*  
15:00-15:30 Coffee

15:30-16:30 Enrico Valdinoci, *Crystal dislocation, nonlocal equations and fractional dynamical systems*

**Friday, September 29, L3**

9:30-10:30 Ovidiu Savin, *Rigidity results for non-local phase transitions*

10:30-11:00 Coffee

11:00-12:00 Maria del Mar González, *Non-local ode: an application to the singular fractional Yamabe problem in conformal geometry*

12:00-14:00 Lunch