

Conference in Memory of John N. Mather

October 1–3, 2018

Taplin Auditorium, Princeton University

Monday, October 1

- 11:00 Welcome & Coffee break
(Fine Hall 3rd floor Common Room)
- 11:30–12:30 Charles Fefferman, Princeton University
Systems of Equations for C^m Functions
- 12:30–2:30 Lunch Break
- 2:30–3:30 Leonid Polterovich, University of Tel Aviv
Persistence barcodes in analysis and geometry
- 3:30–4:00 Coffee break (Fine Hall 3rd floor Common Room)
- 4:00–5:00 Jacques Féjoz, University of Paris, Dauphine
From finite-time unbounded singularities, to the question of stability in the N -body problem

Tuesday, October 2

- 10:00–11:00 Alfonso Sorrentino, University of Rome Tor Vergata
Aubry-Mather theory: the principle of least action in dynamics and beyond
- 11:00–11:30 Coffee break (Fine Hall 3rd floor Common Room)
- 11:30–12:30 Vadim Kaloshin, University of Maryland
Mather's program of proving Arnold diffusion for nearly integrable Tonelli Hamiltonians
- 12:30–2:30 Lunch Break
- 2:30–3:30 Albert Fathi, Georgia Institute of Technology
Recurrence on abelian cover. Application to closed geodesics in manifolds of negative curvature
- 3:30–4:00 Coffee break (Fine Hall 3rd floor Common Room)
- 4:00–5:00 Dennis Sullivan, Stony Brook University
Finite Dimensional Models for Incompressible Fluids in Periodic Three Space

Wednesday, October 3

- 9:30–10:30 Giovanni Forni, University of Maryland
On twisted ergodic integrals
- 10:30–11:00 Coffee break (Fine Hall 3rd floor Common Room)
- 11:00–12:00 James Damon, University of North Carolina
John Mather's Pioneering Work in Singularity Theory and Its Enduring Legacy
- 12:15–1:15 Mark Goresky, Institute for Advanced Study
Mather's work on stratification theory and topological stability