

## Oscillatory Integrals and Dispersive Equations

**Monday March 19, 2001**

- 8:30 *Chairperson: Christoph Thiele*
- 8:30–9:00 *Registration*
- 9:00–9:10 **Eitan Tadmor** (UCLA / University of Maryland)  
*Introduction*
- 9:10–10:00 **Terence Tao** (UCLA)  
*Recent Developments on the Keakeya and Restriction Problems*
- 10:00–11:00 **Michael Christ** (University of California at Berkeley)  
*One Dimensional Schrödinger Operators with Slowly Decaying Potentials*
- 11:00–11:30 *Break*
- 11:30–12:30 **Sergiu Klainerman** (Princeton University)  
*Geometric and Fourier Analysis Methods in Nonlinear Wave Equations*
- 12:30–2:00 *Lunch (on your own)*
- 2:00 *Chairperson: Terry Tao*
- 2:00–3:00 **Barry Simon** (California Institute of Technology)  
*Stability of Spectral Types under Short Range Perturbations*
- 3:00–4:00 **Duong Phong** (Columbia University)  
*Symplectic Forms in the Theory of Solitons*
- 4:00–4:30 *Break*
- 4:30–5:30 *Dinner (Hosted by IPAM)*

**Tuesday March 20, 2001**

- 9:00 *Chairperson: Christoph Thiele*
- 9:00–10:00 **Terence Tao** (UCLA)  
*Recent Developments on the Keakeya and Restriction Problems*
- 10:00–11:00 **Michael Christ** (University of California at Berkeley)  
*One Dimensional Schrödinger Operators with Slowly Decaying Potentials*
- 11:00–11:30 *Break*

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- 11:30–12:30 **Sergiu Klainerman** (Princeton University)  
*Geometric and Fourier Analysis Methods in Nonlinear Wave Equations*
- 12:30–2:00 *Lunch (on your own)*
- 2:00 *Chairperson: Terry Tao*
- 2:00–3:00 **Hart Smith** (University of Washington)  
*Global Existence for Quasilinear Wave Equations Outside of Star-Shaped Domains*
- 3:00–4:00 **Frank Merle** (U. de Cergy and I.U.F.)  
*On Existence and Description of Blow-Up for Critical KdV Equations*
- 4:00–4:30 *Break*
- 4:30–5:30 **Andreas Seeger** (University of Wisconsin)  
*Mean Square Discrepancy Bounds for the Number of Lattice Points in Large Convex Sets*

### Wednesday March 21, 2001

- 9:00 *Chairperson: John Garnett*
- 9:00–10:00 **Nets Katz** (Washington University)  
*New estimates for Kakeya maximal operators*
- 10:00–11:00 **Michael Christ** (University of California at Berkeley)  
*One Dimensional Schrödinger Operators with Slowly Decaying Potentials*
- 11:00–11:30 *Break*
- 11:30–12:30 **Sergiu Klainerman** (Princeton University)  
*Geometric and Fourier Analysis Methods in Nonlinear Wave Equations*
- 12:30–2:00 *Lunch (on your own)*
- 2:00 *Chairperson: John Garnett*
- 2:00–3:00 **Tim Gowers** (Cambridge University)  
*An Analytic Approach to Szemerédi's theorem*
- 3:00–3:15 *Break*
- 3:15–7:00 *Trip to Santa Monica Promenade*

## Thursday March 22, 2001

- 9:00 *Chairperson: Terry Tao*
- 9:00–10:00 **Kenji Nakanishi** (Kobe University)  
*Approximation of Nonlinear Klein-Gordon Equation via Coupled Nonlinear Schrödinger Equations*
- 10:00–11:00 **Konstantin Oskolkov** (University of South Carolina)  
*Oscillatory Hilbert Transforms with Polynomials Phase and Their Applications to Schrödinger Type Equations*
- 11:00–11:30 *Break*
- 11:30–12:30 **Wilhelm Schlag** (Princeton University)  
*On Quasi-Periodic Schrödinger Equations on the Two-Dimensional Lattice*
- 12:30–2:00 *Lunch (hosted by IPAM)*
- 2:00 *Chairperson: Mark Keel*
- 2:00–3:00 **Jean-Yves Chemin** (University of Paris 6)  
*Bilinear estimates and Cubic quasilinear wave equation*
- 3:00–4:00 **Tony Carbery** (University of Edinburgh)  
*Around the Triple Norm Problem*
- 4:00–4:30 *Break*
- 4:30–5:30 **Chris Sogge** (Johns Hopkins University)  
*Riemannian Manifolds with Maximal Eigenfunction Growth*

## Friday March 23, 2001

- 9:00 *Chairperson: Mark Keel*
- 9:00–10:00 **Jim Colliander** (University of California)  
*Almost Conservation Laws and Global Well-Posedness for KdV*
- 10:00–11:00 **Carlos Kenig** (University of Chicago)  
*Boundary Value Problems for the Generalized KdV Equations*
- 11:00–11:30 *Break*
- 11:30–12:30 **Daniel Tataru** (Northwestern University)  
*The Nonlinear Wave Equation*
- 12:30–2:00 *Lunch (on your own)*

