

**Workshop in Celebration of Bjorn Engquist's 60th Birthday: International Forum on Multiscale Methods and Partial Differential Equations**

**Friday August 26, 2005**

- 8:00–8:45 *Check-In/Light Breakfast (Hosted by IPAM)*
- 8:45–9:00 *Welcome and Opening Remarks*
- 9:00–9:45 **Stanley Osher** (IPAM)  
*Inverse scale space for image restoration*
- 9:45–10:30 **Yann Brenier** (University of Paris )
- 10:30–11:00 *Coffee Break*
- 11:00–11:45 **Ingrid Daubechies** (Princeton University)  
*Superfast Fourier transforms.*
- 11:45–2:00 *Lunch (on your own)*
- 2:00–2:45 **Luis Caffarelli** (University of Texas, Austin)  
*Homogenization of free boundary and related problems*
- 2:45–3:30 **Takis Souganidis** (University of Texas, Austin)  
*Convergence of and error estimates of numerical approximations of viscosity solutions*
- 3:30–4:00 *Break*
- 4:00–4:45 **Eitan Tadmor** (University of Maryland)  
*Edge detection, hierarchical decompositions and velocity averaging*
- 5:00–8:00 *Dinner (Hosted by IPAM)*



## Saturday August 27, 2005

- 8:30–9:00 *Continental Breakfast*
- 9:00–9:45 **George Papanicolaou** (Stanford University)  
*Adaptive imaging in random media*
- 9:45–10:30 **Irene Gamba** (University of Texas, Austin)  
*Energy dissipative Boltzmann equations, homogeneous cooling states and overpopulated tails*
- 10:30–11:00 *Coffee Break*
- 11:00–11:45 **Jean-Claude Nedelec** (Ecole Polytechnique, Palaiseau France/CMAP)  
*Preconditioning harmonic Maxwell integral equation.*
- 11:45–2:00 *Lunch (on your own)*
- 2:00–2:45 **Roland Glowinski** (University of Houston)  
*On the numerical solution of a two-dimensional Pucci's equation with Dirichlet boundary conditions: a least-squares approach*
- 2:45–3:30 **John Nash, Jr.** (Princeton University)  
*A New Method for Studying the Coalescence Process and the Natural Realization of Cooperation in Cooperative Games*
- 3:30–4:00 *Break*
- 4:00–4:45 **Tony Chan** (UCLA)  
*Recent progress in total variation image restoration: L1 fidelity and duality*

