

Workshop on Geometric Partial Differential Equations Agenda

February 23-27, 2009

Organizers:

Alice Chang (IAS/Princeton Univ), Luis Caffarelli (IAS/Univ Texas), Matthew Gursky (IAS/Univ Notre Dame)

Messages for workshop guests may be left by calling (609)734-8100 and will be placed on the bulletin board in the lobby of Simonyi Hall.

All talks will be held in Simonyi Hall.

Monday, February 23, 2009

11:30 am - 12:30 Cedric Villani (IAS/ENS-France), Synthetic formulations
12:30 pm - 2:30 Lunch - Dining Hall
2:30 pm - 3:30 Robert McCann (Univ Toronto), External doubly stochastic measures and optimal transportation
3:30 pm - 4:00 Tea - Fuld Hall Common Room
4:00 pm - 5:00 Xu-Jia Wang (Australian National Univ), The affine maximal surface equation and related topics

Tuesday, February 24, 2009

9:00 am - 10:00 Lihe Wang (IAS/Univ Iowa), Estimates for degenerative equations
10:15 am - 11:15 Luis Silvestre (Courant), Regularity results for non-local equations
11:30 am - 12:30 Sophie Chen (IAS/Univ California, Berkeley), Conformal invariants and nonlinear Yamabe problem on manifolds with boundary
12:30 pm - 2:30 Lunch - Dining Hall
2:30 pm - 3:30 Yu Yuan (IAS/Univ Washington), On special Lagrangian equations
3:30 pm - 4:00 Tea - Fuld Hall Common Room
4:00 pm - 5:00 Ovidiu Savin (Columbia Univ), On parabolic Monge-Ampere equations

Wednesday, February 25, 2009

9:00 am - 10:00 Charles Fefferman (Princeton Univ), Alexakis' theorem on conformally invariant integrals
10:15 am - 11:15 Tristan Riviere (ETH Zurich), Conservation laws in conformal geometric analysis
11:30 am - 12:30 Panagiotas Daskalopoulos (Columbia Univ), Ancient type II solutions of the curve shortening flow and the Ricci flow on surfaces
12:30 pm - 2:30 Lunch - Dining Hall
2:30 pm - 3:30 Fang-Hua Lin (Courant), Topological vorticity and conserved geometric motions

Workshop on Geometric Partial Differential Equations Agenda

3:30 pm - 4:00 Tea - Fuld Hall Common Room
4:00 pm - 5:00 Pengfei Guan (McGill Univ), Constant rank theorems and geometric applications

Thursday, February 26, 2009

9:00 am - 10:00 Luis Caffarelli (IAS), Some mathematical issues related to semipermeable membranes.
10:15 am - 11:15 Yanyan Li (Rutgers Univ), A Liouville theorem and some remarks on non-linear elliptical equations
11:30 am - 12:30 John Lott (Univ Michigan), Optimal transport and Perelman's reduced volume
12:30 pm - 2:30 Lunch - Dining Hall
2:30 pm - 3:30 Jie Qing (IAS/Univ California, Santa Cruz), Positive mass theorem for asymptotically hyperbolic manifolds with some corners
3:30 pm - 4:00 Tea - Fuld Hall Common Room
4:00 pm - 5:00 Zindine Djadli (Univ France, Grenoble), Some rigidity results using full non-linear equations

Friday, February 27, 2009

9:00 am - 10:00 Paul Yang (IAS/Princeton Univ), Remarks on the Q-curvature equations
10:15 am - 11:15 Jeff Viaclovsky (Univ Wisconsin), Conformal symmetries of self-dual hyperbolic monopole metrics
11:30 am - 12:30 Simon Brendle (Stanford Univ), Einstein manifolds with non-negative isotropic curvature
12:30 pm - Lunch - Dining Hall

~fini