CONFERENCE SCHEDULE

All main talks are in CB 331

Thursday, May 12

- 8:30-8:50: Registration and Opening Remarks by the Department Chair.
- 8:50-9:40: Robert Jensen, Loyola University of Chicago:
  **TITLE**: $\Delta_\infty$, Tug of War, and Other Digressions
- 9:45-10:35: Luigi De Pascale, Universita di Pisa, Italy:
  **TITLE**: Existence and duality for $L^\infty$-optimal transport.
- 10:35-11:00: **Coffee Break**.
- 11:00-11:50: Peiyong Wang, Wayne State University:
  **TITLE**: The Uniqueness/non-uniqueness of the inhomogeneous infinity Laplace equation.
- 11:55-12:25: David Adams, University of Kentucky:
  **TITLE**: The singular set for solutions to systems of strongly coupled quasi-linear elliptic PDEs.
- 12:25-2:00: **Lunch Break**.
- 2:00-2:50: Kaj Nystrom, University of Umeå, Sweden.
  **TITLE**: Non-Negative p-Harmonic Functions: Regularity and Free Boundary Regularity below the Continuous Threshold.
- 2:50-3:15: **Coffee Break**.

There will be two parallel sessions for contributed talks from participants.

**Session One, CB 331:**

- 3:15-3:45: Lei Zhang, University of Florida:
  **TITLE**: Local gradient estimate for p-harmonic functions on Riemannian manifolds
- 3:50-4:20: Monica Torres, Purdue University:
  **TITLE**: On the distributional divergence of vector fields vanishing at infinity
- 4:25-5:05: Jiuyi Zhu, Wayne State University:
  **TITLE**: An overdetermined problem in Riesz-potential and Bessel-potential

**Session Two, CB 316:**

- 3:15-3:45: Rafal Goebel, Loyola University of Chicago:
  **TITLE**: Viscosity characterizations and convex analysis of quasiconvex and robustly quasi-convex functions
- 3:50-4:20: Mikko Parviainen, University of Jyväskyla, Finland:
  **TITLE**: Viscosity solutions to $p(x)$-Laplace equation
- 4:25-5:05: Marian Bocea, North Dakota State University:
  **TITLE**: $L^\infty$-Variational Problems and Aronsson Equations from Polycrystal Plasticity
Friday, May 13

- 8:30-9:20: Michael Crandall, University of California, Santa Babara  
  **TITLE:** Convexity criteria and uniqueness of absolutely minimizing functions
- 9:25-10:15: Donatella Danielli, Purdue University  
  **TITLE:** Optimal regularity and the free boundary in the parabolic signorini problem
- 10:15-10:40: Coffee Break.
- 10:40-11:30: Peter Juutinen, University of Jyväskyla, Finland:  
  **TITLE:** Parabolic version of the infinity Laplacian
- 11:35-12:25: Yifeng Yu, University of California, Irvine:  
  **TITLE:** Application of L-infinity variational problems in the weak KAM theory
- 12:25-2:00: Lunch Break.
- 2:00-2:50: Juan Manfredi, University of Pittsburgh:  
  **TITLE:** Solutions of nonlinear PDEs in the sense of averages

There will be two parallel sessions for contributed talks from participants.

**Session One, CB 331:**

- 3:15-3:45: Jose Mazon, University of Valencia, Spain:  
  **TITLE:** On the best Lipschitz extension problem for a discrete distance and the discrete $\infty$-Laplacian
- 3:50-4:20: Thomas Bieske, University of South Florida:  
  **TITLE:** The Carnot maximum principle and its application to p-Laplace equations in Carnot groups
- 4:25-5:05: Jasun Gong, University of Pittsburgh:  
  **TITLE:** Regularity of Quasi-Minimizers for Non-Homogeneous Energies on Metric Spaces
- 5:10-5:40: Teemu Lukkari, University of Jyväskyla, Finland  
  **TITLE:** A minimax problem with a variable exponent

**Session Two, CB 316:**

- 3:15-3:45: Xiangjin Xu, Binghamton University, SUNY:  
  **TITLE:** Gradient estimates for $u_t = \Delta F(u)$ on manifolds and some Liouville type theorems
- 3:50-4:20: Yelin Ou, Texas A &M University-Commerce:  
  **TITLE:** $\infty$-Harmonic maps and morphisms between Riemannian manifolds
- 4:25-5:05: Ben Jaye, University of Missouri, Columbia:  
  **TITLE:** Quasilinear elliptic equations and Sobolev inequalities
- 5:10-5:40: Nguyen Phuc, Louisiana State University:  
  **TITLE:** On Calderon-Zymund theory for $p$ and A-superharmonic functions

6:00-8:00: **Conference Buffet Dinner**, Student Center.
8:00-10:30: **Party at John and Cristiana’s house.**
Saturday, May 14

- 8:30-9:20: Scott Sheffield, Massachusetts Institute of Technology:
  TITLE: Optimal Lipschitz extensions of maps to vector spaces and trees: a marriage of conformality and infinite harmonicity, and a game called politics

- 9:25-10:15: Charles Smart, New York University:
  TITLE: Regularity of infinity harmonic functions

- 10:15-10:40: Coffee Break.

- 10:40-11:30: Tilak Bhattacharya, Western Kentucky University:
  TITLE: On solutions to Dirichlet problem involving the infinity Laplacian

- 11:35-12:25: Peter Lindqvist, Norwegian University of Science and Technology, Norway:
  TITLE: Thoughts about the infinity-eigenvalue problem