



PROGRAM

All lectures will be held in Auditorium 232, Amado Mathematics Building

Wednesday, 5 March

- 08:15-09:10 Registration
- 09:10-09:15 Greetings
- 09:15-10:00 Yanyan Li
Gradient estimates for elliptic equations and systems from composite material
- 10:00-10:45 Robert McCann
Extremal doubly stochastic measures and optimal transportation
- 10:45-11:15 
- 11:15-12:00 Wilfrid Gangbo
A symplectic form on the set of probability measures
- 12:00-12:45 Vladimir Oliker
The Aleksandrov problem of existence of convex hypersurfaces with given integral Gauss curvature and optimal mass transport on S^n
- 12:45:14:45 Lunch break**
- 14:45-15:30 Futoshi Takahashi
Asymptotic nondegeneracy of the least energy solutions to an elliptic problem with the critical Sobolev exponent
- 15:30-16:15 Gabriella Tarantello
The role of Onofri type inequalities in the symmetry properties of extremals for the Caffarelli-Kohn-Nirenberg inequality in 2D
- 16:15-16:45 

16:45: 17:30 Yaniv Almog
Stability of the normal state of superconductors in the presence of electric currents

17:30: 18:15 Abbas Bahri
Homology for contact forms via Legendrian curves.

18:45 Reception hosted by the Center for Mathematical Sciences




Thursday, 6 March

09:00-09:45 Juan Soler
Dispersive properties and variational approach to solutions of relativistic and non-relativistic gravitational Vlasov models

09:45-10:30 Danielle Hilhorst
Peak solutions of a chemotaxis-growth system

10:30-11:15 Piotr Biler
Chemotaxis models with nonlocal diffusion

11:15-11:45 


11:45-12:30 Mónica Musso
Bubbling along geodesics for a semilinear supercritical elliptic problem in bounded domains

12:30-13:15 Takashi Suzuki
An analytic approach to the normalized Ricci flow equation

13:15-15:00 Lunch

15:00-15:45 Manuel del Pino
Bump lines in \mathbb{R}^2

15:45-16:30 Xavier Cabre
Saddle shaped solutions of bistable diffusion equations in all of \mathbb{R}^{2m}

16:30-17:00 

17:00-17:45 Peter Sternberg
Critical points via gamma convergence

20:00 Conference Banquet




Friday, 7 March

09:00-09:45 Henri Berestycki
Generalized fronts for reaction-diffusion equations in non-homogeneous media

09:45-10:30 Mikhail Feldman
Free boundary problems in shocks analysis

10:30-11:15 Yann Brenier
Boussinesq equations and optimal transport models

11:15-11:45 



11:45-12:30 Maria Esteban
Critical magnetic fields for the magnetic Dirac-Coulomb operator

12:30-13:15 Tristan Rivière
Analysis aspects of Willmore surfaces


Saturday , 8 March

Excursion

Sunday , 9 March

- 09:00-09:45 Tadeusz Nadzieja
Blow up solutions in nonlocal evolution problems
- 09:45-10:30 Benoît Perthame
Structured population dynamics: the method of generalized entropy
- 10:30-11:00 
- 11:00-11:45 Adimurthi
Hardy-Rellich inequality and existence of first eigenvalues
- 11:45-12:30 Nelly André
On a minimization problem with a mass constraint involving a potential vanishing on two curves
- 12:30-14:15 Lunch**
- 14:15-15:00 Irene Fonseca
Surfactants in foam stability : a phase field model
- 15:00-15:45 Dmitry Golovaty
An effective model for ferronematic liquid
- 15:45-16:15 
- 16:15-17:00 David Kinderlehrer
New perspectives on texture evolution

Monday , 10 March

- 09:00-09:45 Michel Chipot
Convergence of the solution of elliptic problems in strips
- 09:45-10:30 Albert Fathi
Denjoy-Schwartz and Hamilton-Jacobi
- 10:30-11:00 
- 11:00-11:45 Leonid Berlyand
Solutions with vortices of a semi-stiff boundary value problem for the Ginzburg-Landau equation
- 11:45-12:30 Lia Bronsard
Global minimizers for anisotropic superconductors
- 12:30-14:15 Lunch**
- 14:15-15:00 Etienne Sandier
A variational problem for vortex lattices in superconductivity
- 15:00-15:45 Sylvia Serfaty
From the Ginzburg-Landau energy to lattice problems: upper bound and study of the limiting energy
- 15:45 **Concluding Remarks**