

**Conference Nonlinear Partial Differential equations and Applications  
in Honor of James Serrin**

**Program**

**Monday 6 of June**

8.30-9.30 welcome and opening of the conference

9.30-10.15 L. A. Peletier

*Best Sobolev constants and elliptic equations on spheres*

10.15-11.00 P. Mironescu

*Sobolev maps with values into spheres: degree and minimal connection*

11.00-11.15 Coffee Break

11.15-12.00 YY Li

*Liouville type theorems for degenerate conformally invariant fully nonlinear equations,  
and isolated singularity*

12. 30-15.30 lunch (on the campus)

15.30-17.00 Honoris Causa Ceremony

17.30 Cocktail party<sup>1</sup> on the Campus jointly organised by the city of Tours and the University François Rabelais in honor of the two distinguished residents of Minneapolis, a city to which Tours is associated : Don Aronson and James Serrin

**Tuesday 7 of June**

9.00-9.45 R. Finn

*Compressible liquids in a capillary tube*

9.45-10.30 J. L. Vazquez

*Mirae proprietates functionales diffusionum velocium<sup>2</sup>*

10.30-11.00 Coffee Break

11. 00-11.45 X. Cabré

*Local minimizers for boundary reactions: renormalized energy and applications*

11. 45-12.30 M. Marcus

*Characterisation of positive solutions of some semilinear elliptic  
equations via boundary trace*

12. 30-14.00 lunch (on the campus)

14.00-14.45 F. Bethuel

*Rectifiability of trajectories in the two-dimensional parabolic Ginzburg-Landau equation*

14.45-15.30 D. Smets

*Potential estimates for measures with bounded  $k$ -densities and applications  
to Ginzburg-Landau equations*

15.30-16.00 Coffee Break

16.00-14.45 Ph. Souplet

*$L^p_\delta$  spaces and their applications to elliptic and parabolic problems*

16.45-17.30 M. Escobedo

*Singular classical solutions for a quantum kinetic equation*

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<sup>1</sup> Haïm Brezis had an accident which will prevent him from giving his lecture. If he can do it, he will come at the ceremony to take part in James Serrin's celebration.

<sup>2</sup> The strange functional properties of fast diffusion flows

## Wednesday 8 of June

9.00-9.45 J. I. Diaz

*Beyond regular Lagrangians: bifurcation branches of variational solutions to some singular elliptic equations and solutions with compact support of some Hamiltonian systems*

9.45-10.30 L. Boccardo

*T-minima: existence and main properties*

10.30-11.00 Coffee Break

11. 00-11.45 F. Merle

*On description of blow-up solution for critical Non Linear Schrodinger*

11. 45-12.30 D. Aronson

*Wave propagation and blocking in inhomogeneous media*

12. 30-14.00 lunch (on the campus)

14.00-14.45 J. M. Coron

*Control of a fluid and of a quantum particle in a moving box*

14.45-15.30 J. Mawhin

*A forgotten « Royal » ancestor of a theorem of James Serrin*

15.30-16.00 Coffee Break

16.00-16.45 P. Pucci

*Qualitative properties for solutions of singular elliptic inequalities on complete manifolds*

17.00 Problems session and closing ceremonies

The Honoris Causa ceremony and all the conferences will be held on the campus of the  
Faculté des Sciences et Techniques

In Parc de Grandmont (Tours Sud)

The conferences will be held in Ampitheater 22 (Forum)

The Honoris Causa will be held Ampitheater 030 (Bat. E2)

The locations will be indicated on the Campus