

International Conference on Structural Nonlinear Dynamics and Diagnosis Agadir, May 19-21, 2014 CALL FOR PAPERS

Mini-Symposium on Slow-Fast Dynamics and Bifurcations in Dynamical Systems Mathematical Methods and Applications

The Organizing Committee invites scientists and engineers working in the areas of slow-fast dynamics and bifurcations to submit their contribution to this mini-symposium before December 31, 2013 online, after pre-registration for the conference. Full instructions for authors are available at the conference web site: http://www.csndd.org/csndd2014

Dynamical systems of slow-fast type are ubiquitous in physics and biology. Examples include the stick-slip cycle of a bowed violin string; the see-saw with a water reservoir at one side; the saline oscillator; the closing of plant leaves; the release of calcium from intracellular stores into the cytoplasm; the "firing" of neurons as well as of cardiac cells; and many others. Such systems are typically described by nonlinear differential equations in which several processes occur on at least two different time scales, and which may give rise to rich dynamics that includes canards and complex oscillatory behavior of mixed-mode or bursting type.

The mini-symposium will provide a forum for reporting novel and interesting phenomena in slow-fast dynamics and bifurcations in dynamical systems both from an analytical and a computational perspective, and with a clear view towards applications. Correspondingly, contributed papers may be of a theoretical, numerical, or even experimental nature.

Dates

- December 31, 2013: Pre-registration and submission deadline of papers
- January 31, 2014: Notification of acceptance
- February 28, 2014: Final manuscript to be submitted

For more information about the symposium, please contact:

M. A. Aziz Alaoui	B. Ambrosio
LMAH, FR-CNRS-3335,	LMAH, FR-CNRS-3335,
Normandie Université, Le Havre, 25 Rue	Normandie Université, Le Havre, 25 Rue Ph.Lebon,
Ph.Lebon,	BP:540, 76058 Le Havre Cedex,
BP:540, 76058 Le Havre Cedex,	France.
France.	benjamin.ambrosio@univ-lehavre.fr
aziz.alaoui@ univ-lehavre.fr	
J. P. Françoise	N. Popovic
Université PM. Curie	University of Edinburgh, School of Mathematics and
Laboratoire JL. Lions, UMR 7598	Maxwell Institute of Mathematical Sciences, James
CNRS-Paris 6	Clerk Maxwell Building King's Buildings, Mayfield Road UK.
4 Place Jussieu, 75252, Paris France.	Nikola.Popovic@ed.ac.uk
R. Yafia	
Universite Ibn Zohr;	
Faculte Polydisciplinaire de Ouarzazate;	
B.P : 638 Ouarzazate, Morocco.	
yafia1@yahoo.fr	