basque center for applied mathematics

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Universidad del País Vasco
Euskal Herriko Unibertsitatea

Basque Colloquium in Mathematics and its Applications

11:30 Jean-Baptiste HIRIART-URRUTY, University Paul Sabatier, Toulouse, France

THE Є-STRATEGY IN VARIATIONAL ANALYSIS

In this work we discuss variational (or optimization) problems which do not have solutions necessarily, but which do have approximate solutions (or solutions within $\epsilon > 0$). The question we address is: what to do with such ϵ-solutions? We shall see how to recover all the minimizers of the relaxed version of an abstract variational problem in terms of ϵ-minimizers of the original variational problem (specially when the later has no solution).
Applications to two classes of approximation problems in a Hilbert space setting will be shown.

12:30 Björn BIRNIR, University of California, Santa Barbara, CA, USA

EXISTENCE, UNIQUENESS AND STATISTICAL THEORY OF THE STOCHASTIC NAVIER-STOKES EQUATION IN THREE DIMENSIONS

We will discuss the existence of unique rough solution of the Navier-Stokes equation in three dimensions. These solutions are the result of noise that the equation produces at high Reynolds numbers. They also give a unique invariant measure that permits the development of Kolmogorov's statistical theory of turbulence.

October 9, 2009
Room 0.24, Faculty of Science and Technology, UPV/EHU (LEIOA campus)

Organizers and contacts:

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RSVP for Lunch after Colloquium