SPEAKER:

Claudio Munoz, Universidad de Chile

TITLE:

Decay properties of large solutions of KdV type equations

ABSTRACT:

In this talk I will review some recent results describing decay properties of (non)integrable Korteweg-de Vries like models, independently of the short or large range of the nonlinearity. We will focus on the description, via Virial identities, of decay for almost all times of the L^2 norm of solutions to gKdV, Benjamin-Ono, Zakharov-Kuznetsov and other shallow water wave models. These are joint works with G. Ponce (UCSB), C. Kwak (Ewha Womans U), M. A. Alejo (U. Crdoba), F. Cortez (EPN Ecuador), J.-C. Saut (U. Paris-Saclay), A. Mendez (CMM), J. C. Pozo (U. Chile) and F. Poblete (UACH).