

B. Buffoni – B. Dacorogna – J. Krieger - H.M Nguyen - Section Mathématiques

## SEMINAIRE D'ANALYSE

➤ VENDREDI 3 JUIN 2016 à 15h15 - salle CM010

Professeur **UMBERTO HRYNIEWICZ** (Federal University of Rio de Janeiro, Brésil) donnera une conférence sur le thème:

### « Elliptic methods in Hamiltonian Dynamics, and a Poincare-Birkhoff theorem for Reeb flows»

This talk is intended to be an expository lecture on Floer theory and modern symplectic topology. In the 1980's Floer used elliptic methods to study the "unregularized" gradient flow of the Hamiltonian action functional. This is a breakthrough in overcoming the difficulties of effectively using the action in general symplectic manifolds. I will explain the comparison between Floer theoretical versus classical methods, and exemplify the power of Floer theory with a version of the Poincare-Birkhoff theorem for tight Reeb flows on the three-sphere. This is joint work with Al Momin and Pedro A. S. Salomao.

Lausanne, le 23 mai 2016  
BD/vl

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Les séminaires qui ont lieu à la Section de Mathématiques sont annoncés sur Internet  
<http://memento.epfl.ch/math/>