



# AVVISO DI SEMINARIO

**Martedì 14 gennaio 2014 - ore 16:00**  
Dipartimento di Matematica – Aula MT11 – cubo 30B

prof. **Jose Angel Cid**  
Università di Vigo

Title:

## ***“Periodic oscillations in a singular model of valveless pumping”***

**Abstract:**

The phenomenon of "valveless pumping" (the conveyance of liquid fluids in mechanical systems that have no valves to ensure the preferential direction of the flow) can be found in several physical systems, for instance, the blood circulation in human embryos and invertebrates. We will deal with a singular boundary value problem modelling such phenomenon and we will provide existence and stability results for some values of the involved physical parameters.

This is a joint work with G. Propst and M. Tvrdy.

IL DIRETTORE DEL DIPARTIMENTO  
prof. Nicola LEONE