

# SEMINARIO

## Cinzia Elia

*Università degli Studi di Bari*

### ***Qualitative behavior of numerical solutions for planar discontinuous dynamical systems***

**Abstract:** We consider a planar linear discontinuous system with an asymptotically stable periodic orbit and we study the qualitative behavior of the numerical approximation obtained with forward Euler with and without event location. Differences and similarities with the theory for smooth systems will be highlighted and justified both numerically and theoretically.

This work is done in collaboration with Luca Dieci and Timo Eirola.

**Escuela de Ingenierías Industriales - Paseo del Cauce, aula B1**  
**Martes 26 de Junio de 2018 (11:00)**  
**Organiza: G.I.R. Sistemas Dinámicos**

