

## SEMINARIO

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### ***Statistical stability in dynamical systems***

**Abstract:** If each member of a continuous family  $(f_t)_t$  of dynamical systems possesses a 'physical' measure  $\mu_t$  (that is, a measure describing the behaviour of Lebesgue-typical points), one can ask if the family of measures  $(\mu_t)_t$  is also continuous in  $t$ : this is statistical stability, so called because the statistics (for example, in terms of Birkhoff averages for  $(f_t, \mu_t)$ ) change continuously in  $t$ . I'll discuss this problem for interval maps (eg tent maps, quadratic maps). Statistical stability can be destroyed by topological obstructions, or by a lack of uniform hyperbolicity. I'll outline a general theory which guarantees statistical stability, giving examples to show the sharpness of our results. This is joint work with Neil Dobbs (UC Dublin).

**Aula I-6, Escuela de Ingenierías Industriales - Paseo del Cauce  
Jueves 24 de Mayo de 2018 (11:00)**

**Organiza: G.I.R. Sistemas Dinámicos**

