



Mês de: Julho 2012

SEMINÁRIO DE ANÁLISE E EQUAÇÕES DIFERENCIAIS

Dia 26 de Julho (quinta-feira), às 13h30, na Sala B3-01

“An age structured cell population model for transitions between proliferating and quiescent subpopulations”

Yukihiko Nakata

(Bolyai Institute, University of Szeged, Hungary)

Abstract:

We present Delay Equations describing age-structured cell population dynamics where the cell population is divided into proliferative and quiescent cells. We derived a characteristic equation for an interior equilibrium and analyzed the model in the framework of [1,2]. We will show how to use the characteristic equation to determine stability boundaries for the interior equilibrium in a two-parameter space. This is a joint work with Odo Diekmann and Philipp Getto.

References:

- [1] O. Diekmann, S.A. van Gils, S.M.V. Lunel, H.O. Walther (1995) Delay Equations: functional, complex, and nonlinear analysis, vol 110 of Applied Mathematical Sciences. Springer-Verlag.
- [2] O. Diekmann, Ph. Getto, M. Gyllenberg (2007) Stability and bifurcation analysis of Volterra functional equations in the light of suns and stars. SIAM J. Math. Anal. 39: 1023-1069.

Local:
**Instituto para a Investigação Interdisciplinar
da Universidade de Lisboa**
Av. Prof. Gama Pinto, 2
1649-003 Lisboa

