Mês de: Outubro 2010

SEMINÁRIO DE TEORIA DOS MODELOS

Dia 22 de Outubro (sexta-feira), às 16h, na Sala B3-01

"Genericity and definable groups in semi-bounded o-minimal structures"

PANTELIS ELEFTHERIOU

(CMAF UNIVERSIDADE DE LISBOA, PORTUGAL)

Abstract:

An o-minimal expansion M=(M, <, +, 0, ...) of an ordered group is called "semi-bounded" if it does not expand a real closed field. Possibly, it defines a real closed field on some bounded interval I. Let us call a definable set "short" if it is in definable
bijection with a definable subset of some I^n, and "long" otherwise. In this setting:

(a) we prove a structure theorem which states that every definable set is a finite union of sets each of which is a short set "stretched"
along some long direction.

(b) we introduce a new notion of pregeometry that gives rise to a notion of genericity which we then use to study definable groups,
locally.

(c) (with Y. Peterzil) we prove that the universal cover of a definably connected, abelian definable group is an extension of a
V-definable semilinear group by a V-definable short group.

(d) (with Y. Peterzil) we prove a stronger theorem that implies the Compact Domination Conjecture in this setting.

Local:
COMPLEXO INTERDISCIPLINAR
Av. Prof. Gama Pinto, 2
1649-003 Lisboa

HOSP.
SANTA
MARIA

Av. Prof. Gama Pinto

Entrada

ENTRECAMPOS