

UNICAMP – IMECC  
Departamento de Matemática

## Seminário de Sistemas Dinâmicos e Estocásticos

**Expositor:** D. Smania (ICMC-USP)

**Título:** Renormalization and universality for some  
piecewise smooth homeomorphisms of the circle

**Data:** Sexta-feira, 18 de junho de 2010, 13h30min

**Local:** Sala 321 do IMECC

**Resumo.** In this work in progress with Kleyber Cunha (ICMC-USP), we find sufficient conditions for two piecewise  $C^{2+\nu}$  homeomorphisms  $f$  and  $g$  of the circle to be  $C^1$  conjugate. Besides the restrictions on the combinatorics of the maps (we assume that the maps have the same “bounded” combinatorics) and necessary conditions on the one-sided derivatives of points where  $f$  and  $g$  are not differentiable, we also assume zero mean nonlinearity for  $f$  and  $g$ . The proof relies on the detailed study of the renormalization of genus one generalized interval exchange maps with certain restrictions on its combinatorics.

Consulte a programação em [[www.ime.unicamp.br/ssde](http://www.ime.unicamp.br/ssde)].