



**Mês de: Dezembro 2009**

## **SEMINÁRIO DE GEOMETRIA**

**Dia 11 de Dezembro (sexta-feira), às 16h, na Sala B3-01**

**Constrained Willmore Surfaces**

Symmetries of a Möbius Invariant Integrable System

Part II

***Áurea Quintino***

(CMAF)

**Abstract:**

We define a Bäcklund transformation of constrained Willmore surfaces.

A permutability between Bäcklund transformation and spectral deformation is established. We define *conserved quantity* of a constrained Willmore surface and approach it under spectral deformation and Bäcklund transformation. The class of CMC surfaces in 3-dimensional space-form is established as the class of constrained Willmore surfaces in 3-space admitting a conserved quantity and, in particular, as a class of surfaces preserved under constrained Willmore transformation, for special choices of parameters.

Parcialmente suportado pela FCT ao abrigo do Financiamento Base 2009

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

