

## Brendan Guilfoyle (Tralee/ Ireland) Proof of the Caratheodory Conjecture, Part I

## ZEIT:

14.1.2009, 16:30 Uhr - 17:30 Uhr

## **ORT:**

HU Berlin Institut für Mathematik Rudower Chaussee 25, Room I.410 Berlin-Adlershof

In these two self-contained talks we outline a proof of the Caratheodory conjecture, which states that there must be at least 2 umbilic points on a closed convex surface in Euclidean 3-space. The proof involves a reformulation of the Conjecture in terms of the index of an isolated complex point on a Lagrangian surface in TS2, and establishing the existence of holomorphic discs with boundary lying on the Lagrangian surface.

In this first talk we describe the geometric setting and the reformulations of the Conjecture.