



Wintersemester 2015/16

**Oberseminar  
Geometrische Analysis und Mathematische Relativitätstheorie**

Am Donnerstag, den **5.11.2015** spricht um **14 Uhr c. t.** im Raum N08 (Hörsaalzentrum)

**Dr. Andrea Mondino**  
(ETH Zürich)

über das Thema

**Willmore Tori in Riemannian manifolds**

The Willmore functional of an immersed surface in a Riemannian manifold is the  $L^2$  norm of the mean curvature. The functional appears in many fields of mathematics and science in general: in biology (Helfrich energy), in general relativity (Hawking mass), optics, etc. After an introduction to the topic, in the seminar I will present a joint work with A. Malchiodi and N. Ikoma where we construct Willmore tori in Riemannian manifolds. In particular I will discuss the case the ambient manifold is the Schwarzschild space, one of the most studied manifolds in general relativity.

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken, C. Nerz