



**Oberseminar  
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie**

Am Donnerstag, den **14.07.2022** spricht um **14 Uhr** im Raum **S9**

**Dr. Giada Franz**  
(ETH Zürich)

über das Thema

**Construction and properties of free boundary minimal surfaces**

A free boundary minimal surface (FBMS) in a given three-dimensional Riemannian manifold is a critical point of the area functional with respect to variations that constrain its boundary to the boundary of the ambient manifold.

We will give an introduction to the study of FBMS and their properties. Then, we will focus on an equivariant min-max theory useful to prove existence of FBMS with prescribed topology. We anticipate that this is the method employed by Mario Schulz in the second talk to construct FBMS in the unit ball with connected boundary and arbitrary genus.

Hierzu wird herzlich eingeladen.

C. Cederbaum, M. Graf, G. Huisken