



UNIVERSITÀ
DI TRENTO

Dipartimento di
Matematica

DOTTORATO



Wednesday 30 November 2022 – at 9.30 am
“Physics Seminar room” – Department of Physics

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Min-max construction of minimal surfaces with contact angle conditions

Abstract:

Existence and regularity of minimal surfaces (i.e. stationary points for area functional) with various boundary conditions has been an active topic of research for the last decades. Although minimizing methods usually provide existence of solutions for some kinds of boundary constraints, they may produce just trivial solutions when dealing with different topological/boundary conditions; in that cases, one has to rely on different ways to obtain a critical point for the given functional. Min-max methods have been successfully used for some of these problems.

In this talk I will explain the basic ideas of min-max theory applied to the problem of finding, in a container in the 3-dimensional euclidean space, a minimal surface which meets the boundary with a fixed angle.

This is based on a joint work with G. De Philippis.

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CONTATTI

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