



## GEOMETRY AND TOPOLOGY, UNIVERSITY OF MÁLAGA



### INTRODUCTION

The research group Geometry and Topology, University of Malaga from the Faculty of Sciences, is specialized in the studies of pure mathematics; however, research can be applied to fields as distinct as economics or robotics. Thus, the 12 members of the group have a profound experience as advisors for the design and the shape of surfaces in order to present optimized reflective and refractive properties for sound, light and other electromagnetic waves. The practical applications are of interest for various companies designing, e.g., photovoltaic panels or parabolic antennas.

### RESEARCH TOPICS

- Homotopy theory.
- Topological robotics.
- Geometric models in economy.
- Localization theory.
- Theoretical physics: Reflective and refractive surfaces.
- Symplectic geometry.

### SCIENTIFIC-TECHNICAL SERVICES

- Advisor in robotics.
- Advisor on reflective and refractive surfaces.
- Training in homotopy theory and its applications.
- Organization of congresses on:
  - Geometry.
  - Topology.

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