Topology and geometry of real singularities

Nicolas Dutertre
Aix-Marseille Université, France

The aim of this mini-course is to provide the students with tools and techniques used in the theory of real singularities and to apply them to get interesting results on the topology and geometry of real singularities. The content of the course will be the following :

1. Background in differential topology and differential geometry,

2. Basic results on the topology of real analytic/semi-analytic sets ,

3. Methods for the computation of topological invariants of real analytic/semi-analytic sets,

4. Results on the geometry of real analytic/semi-analytic sets.