



Titolo: Delooping problems in differential topology

SPEAKER/LECTURER: Victor Turchi

Joint with Roma 1, La Sapienza and Roma Tre

Period: January-March 2026

Schedule: 30 h (20h introductory+10h advanced)

Room: T.B.A.</td>

ABSTRACT

The goal of the course is to provide an introduction to the manifold functor calculus and its modern reformulation in the operadic language. The main application that we will consider is the delooping problem for many types of mapping spaces: disc embedding spaces relative to the boundary, more general spaces of disc maps avoiding a fixed type of a multi-singularity (such as non-k-equal immersions), disc concordance embeddings, etc.

We will also discuss the smoothing theory approach to delooping of diffeomorphism and embedding spaces.