Topology Seminar

Najib Idrissi

of IMJ-PRG will be speaking on

Configuration spaces of surfaces

on March 15 at 4:30 in
MIT Room Zoom

Framed configuration spaces of a surface form a right module over the framed little disks operad. This rich algebraic structure has important consequences, for example for the computations of manifold calculus or factorization homology. Determining the homotopy type of this operadic right module remains however a difficult task. In this talk, I will explain how to compute the rational homotopy type for oriented compact surfaces. The end result is a finite-dimensional purely combinatorial model. The proof involves several ingredients: Kontsevich's formality, Tamarkin's formality, and the cyclic formality of the framed little disks operad. (Joint work with Ricardo Campos and Thomas Willwacher.)

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