

Submission for an invited session, organized by Ana Cristina Casimiro
& Paula Pascoal-Faria

What do configurations of points tell us about a space?

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Algebraic Topology is concerned with studying topological spaces by making use of the methods from Algebra. By looking at them through the algebraic lens, topologists have been able to uncover the otherwise hidden structures in spaces. Although nowadays mathematicians have an extensive arsenal of algebraic invariants to distinguish spaces, in this talk I want to focus on the more recent use of configuration categories to understand certain spaces of functions, such as embedding spaces or spaces of homeomorphisms.