Connected scenes and their invariants

Introduce: Maurizio PAOLINI Università Cattolica del Sacro Cuore

Interviene: Prof. Yi-Sheng WANG

National Taiwan University

Abstract

Connected scenes are embedded connected oriented surfaces in the 3-sphere. This embedding theory incorporates knot theory and handlebody knot theory, and has an interesting, subtle connection to its unoriented version:

surfaces in the 3-sphere.

The talk presents joint work with G. Bellettini (UNISI) and M.

Paolini (UNICATT) and focuses on connected scenes with homeomorphic complements.

Such connected scenes exist only when the genus of surfaces is larger than 1; it is impossible to detect the difference between them by looking at the fundamental group alone.

I will start the talk with some basic notions of connected scenes, and then move on to constructions of connected scenes with homeomorphic complements with some explicit examples. Lastly, I will talk about invariants of connected scenes that are capable to distinguish such connected scenes.

Seminario

Mercoledì 23 gennaio 2019 Aula 1, ore 14.30 Via dei Musei 41 - Brescia

