

abstract

WORKSHOP ON TOPOLOGY: IDENTIFYING ORDER IN COMPLEX SYSTEMS

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

For a planar domain, a finite point configuration is said to be caging, if the set of Euclidean motions of the domain not hitting the point configuration is bounded. Caging configurations are important in robotics and are a popular topic in computational geometry.

We argue that caging is best understood in topological terms, manifesting itself as nontrivial linking of certain closed curves (in the group of motions of the Euclidean plane), which can be translated into effectively computable invariants of pairs of framed planar curves.