

abstract

WORKSHOP ON TOPOLOGY: IDENTIFYING ORDER IN COMPLEX SYSTEMS

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

The space of all positions of n disks of radius r in a bounded region has long been studied from the points of view of statistical mechanics and probability. A phase transition is known to occur from simulations, but this is still mysterious to mathematicians. A problem suggested by Persi Diaconis is to study these spaces topologically. In this talk I will report on recent progress on this problem. This will include joint work with Yuliy Baryshnikov, Peter Bubenik, Gunnar Carlsson, and Jackson Gorham