

abstract

Computer Science/Discrete Mathematics Seminar II
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We all know Shannon's entropy of a discrete probability distribution. Physicists define entropy in thermodynamics and in statistical mechanics (there are several competing schools), and want to prove the Second Law, but they didn't succeed yet (very roughly speaking, the Second Law claims that the entropy always increases). What I do is motivated by physics, but I ask a new, strictly combinatorial/geometric question. Assume that we have a large finite set of points in the unit square. Is it possible to define a "geometric entropy", which increases for "typical motion" of the points? If you want to know the answer, please come to my talk.