"Here's to pure mathematics – may it never be of any use to anybody."

The Trivial Notions Seminar
Proudly Announces

How I learned to stop worrying and love practicality

A talk by

Jenny Kaufmann

Abstract

In classical complexity theory, all problems with polynomial-time algorithms are treated as more or less equivalently hard. Fine-grained complexity theory paints a more detailed picture of the complexity landscape, by distinguishing problems that can be solved in runtimes given by specific functions. I will discuss the fine-grained complexity of diameter approximation, a popular problem in this field, and present some cool reductions from k-SAT and k-OV giving conditional runtime lower bounds based on the Strong Exponential Time Hypothesis (SETH). I'll also present a simple new "efficient" approximation algorithm for another graph distance parameter, called min-eccentricity.

Friday, November 13$^{\text{th}}$, at 12 noon