



universität
wien

Fakultät für Mathematik

Mathematisches Kolloquium

Mittwoch, 8. März 2023

Sky Lounge

EINLADUNG

Erik Carlsson
(UC Davis)

„A "witness complex" for density landscapes“

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Abstract:

Let $f(x)$ be a positively weighted sum of Gaussian kernels on \mathbb{R}^m , each with the same scale parameter, also known as a kernel density estimator. I will discuss the problem of approximating the super-level sets of $f^{-1}[d, \infty)$ by a family of nested simplicial complexes in a computationally tractable way. Part of this construction involves assigning to $f(x)$ a certain power diagram, which is a shifted generalization of the Voronoi diagram.

14.45 Uhr: Kaffeejause

15.15 Uhr: Vortrag

Vinum cum pane im Anschluss

Anton Mellit
José Luis Romero
Radu Ioan Boț