Institute of Geometry

Seminarvortrag

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Seminarraum 2 Geometrie

The MST-Ratio: A New Measure of Mixedness for Colorful Point Sets

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Recently, motivated by applications in spatial biology, we explored the interactions between color classes in a colored point set from a topological perspective. We introduced MST-ratio as a measure for quantifying the mingling of points with different colors. Investigating this measure raises intriguing questions in discrete geometry, which is the primary focus of this talk. In this talk, I will introduce the concept of the MST-ratio, present the best-known bounds and key complexity results for computing its maximum, and share new findings on its behavior in both random and arbitrary point sets. Finally, I will highlight several open questions in discrete and stochastic geometry that arise from this work.

Michael Kerber