

Institut fuer Geometrie

Gastvortrag

08.09.2016, 14:00-15:00

HS D (Kopernikusgasse 24, 3.Stock)

The unexpected efficiency of persistent cohomology

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I will discuss the efficient computation of the persistence barcode of a Vietoris–Rips filtration given a finite metric space. The implementation in the developed C++ code “Ripser” focuses on memory and time efficiency, where the code outperforms existing software by a factor of more than 40 in computation time and a factor of more than 15 in memory efficiency.

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