Algebra/Topology Seminar

René Corbet
Graz University of Technology, Austria

A Kernel for Multi-Parameter Persistence and its Computation

Thursday, March 7, 2019
1:15 p.m. in ES-143

ABSTRACT. Topological data analysis and its main method, persistent homology, provide a toolkit for computing topological information of high-dimensional and noisy data sets. Kernels for one-parameter persistent homology have been established to connect persistent homology with machine learning techniques. In this talk, we discuss a kernel construction for multi-parameter persistence and why this kernel can provably be useful in applications. This is joint work with U. Fugacci, M. Kerber, C. Landi, and B. Wang.