

Applied Topology in Albany (ATiA) Seminar

OLIVER GÄFVERT Oxford

Multiparameter Persistence and Gröbner Bases

Friday, April 29, 2022 11:30 a.m. on Zoom

ABSTRACT. In recent work with M. Lesnick and M. Bender we formulate an algorithm for computing multiparameter persistence modules and their minimal presentations using results from computational algebra and Gröbner basis theory. In this talk I will highlight interesting connections between Gröbner basis theory and topological data analysis from a computational perspective.