Mathematics, Statistics, and Computer Science **@ UIC**

## Graduate Computational Algebraic Geometry Seminar

*Enumerating Zonotope Vertices for Correlation Clustering*

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**Abstract:** A zonotope is the linear projection of a high dimensional hypercube into a lower-dimensional space. Many combinatorial optimization problems can be solved by enumerating vertices of this special kind of convex polygon. In this talk I will give a general introduction to zonotopes, and then demonstrate how sampling vertices of the so-called signing-zonotope leads to a fast method for the task of correlation clustering on low-dimensional datasets.

Thursday, April 27 at 3:00 PM in SEO 1227