

DALHOUSIE MATHEMATICS COLLOQUIUM

Thursday March 8, 3:30 pm, Chase 319

Please note special time

Speaker: Kuei-Nuan Lin

(The Penn State University, Greater Allegheny)

Blow up algebras of monomial ideals

Blowups are the most fundamental transformation in birational geometry. In applied mathematics modeling theory, finding the defining equations of blow ups is the implicitization problem. When the blow up is coming from monomial ideals, it plays an important role in testing how well a model fits the given data in algebraic statistics. I will start with basic definitions of blow up algebras. Next, I will talk about the recent work on blow ups of monomial ideals. Finally, I will share the results on blow ups of monomial ideals associated with 3-dimensional Ferrers diagrams. This is joint work with Yi-Huang Shen.