BI-CO MATHEMATICS COLLOQUIUM

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"Grothendieck polynomials via flow polytopes"

Monday, November 5, 2018
Talk at 4:00 – H109
Tea at 3:30 – Foyer outside of H109

Abstract:

The flow polytope associated to an acyclic graph is the set of all nonnegative flows on the edges of the graph with a fixed netflow at each vertex. We will first discuss a family of dissections of certain flow polytopes and an invariant of these different dissections. We will then explain how this invariant leads to a family of Schubert and Grothendieck polynomials. We fill finish by showing how this connection implies interesting results about the Newton polytopes of Schubert and Grothendieck polynomials.

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