

⊠ ALGEBRA SEMINAR TALK ⊠

FRIDAY, MARCH 6, 2009

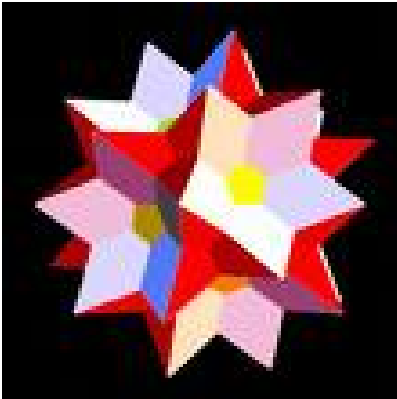
MEHDI GARROUSIAN

The University of Western Ontario

3:30 P.M. – Middlesex College Room 106

**“Structured resolutions of monomial and binomial algebras”**

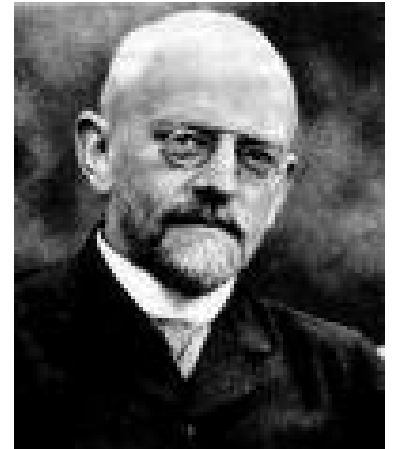
The plan of the talk is to look at some explicit recipes for constructing minimal free resolutions of certain 'nice' classes of monomial and binomial ideals in a polynomial ring. The general idea is to introduce appropriate simplicial or polytope complexes which encode the information of a free resolution and read off the resolution from the complex.



polytope



Mehdi Garrouisian



David Hilbert

Ideals in polynomial rings are remarkably beautiful, elegant, and mysterious. We long to know their secrets, their shadows, their shadows of their shadows, their syzygies, their appearance in their geometrical costumes, their mischievous simplicial complex winks. Time and time again Mehdi Garrouisian, full of enthusiasm and mastery, has guided us fellow mathematical travelers through dangerous places filled with possibly fatal calculations and amazing quick turns, until we suddenly have found ourselves at a summit with a breathtaking view. So it will be again this Friday that we shall view free minimal resolutions with maximal joy.

☺ ALL ARE WELCOME!