## Colloquium

## Louiza Fouli

New Mexico State University

## Friday, February 22, 2013 at 3 pm in Bell Hall 143

## Rees algebras of square-free monomial ideals

A classical topic in commutative algebra and algebraic geometry is the resolution of singularities. One way to resolve a singularity at a point is by blowing up the point. We will discuss the corresponding algebraic construction, namely the Rees algebra of an ideal. We will focus on the case of square-free monomial ideals and give a combinatorial characterization of the defining equations of such Rees algebras.

This is a joint work with **Kuei-Nuan Lin**.