

# Queen's Algebraic Geometry — Seminar —

## POWERS OF EDGE IDEALS WITH LINEAR RESOLUTIONS

ANDREW HOEFEL  
Queen's University

### Abstract

In this talk, I will discuss various problems concerning the regularity of powers of edge ideals. My primary interest is in combinatorial proofs that certain powers of edge ideals have linear resolutions. For instance, it is known that all powers of the edge ideal of a cochordal graph have linear resolution, but it is not known whether they have linear quotients. Further, Peeva and Nevo have a conjecture on when powers of certain edge ideals should become linear. I'll discuss the available tools and introduce a new technique that shows some promise.

Monday 19 September 2011  
16:30 – 17:30  
319 Jeffery Hall