**IAIN BEATON**, Dalhousie University
*On the Unimodality of Domination Polynomials*

A polynomial is said to be unimodal if its coefficients are non-decreasing and then non-increasing. The domination polynomial of a graph $G$ is the generating function of the number of domination sets of each cardinality in $G$, and its coefficients have been conjectured to be unimodal. In talk paper we will show the domination polynomial of paths and cycles are unimodal, and that the domination polynomial of almost every graph is unimodal with mode $\lceil \frac{n}{2} \rceil$. This joint work with Jason Brown.