Combinatorics and Graph Theory Seminar

Friday, September 26, 2014

3:00 pm-3:50 pm in Hume 331

Some analytic methods for hypergraphs

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ABSTRACT This talk will present an analytic approach for studying hypergraphs. The roots of the method are in the spectral theory for 2-graphs and in the theory of variational spectra of hypermatrices. The basic concepts of the method give a single viewpoint to a number of problems in hypergraphs, erasing the differences between spectral and nonspectral results. The approach is particularly appropriate for extremal problems; for example it allows to prove that spectral extremal problems for hypergraphs are asymptotically equivalent to the corresponding edge extremal problems.

This talk is not too technical and it should be interesting for a wider audience.