VCU Discrete Mathematics Seminar

Spanning cycles and 2-factors in hypergraphs

Prof Andrzej Czygrinow
Arizona State University

Wednesday, Nov. 15
1:00-1:50
4145 Harris Hall

Dirac's theorem states that every n-vertex graph with minimum degree at least $\frac{n}{2}$ has a spanning cycle. There are many related results on 2-factors in graphs which generalize this fundamental fact. In this talk we will discuss possible analogs and generalizations of these results to hypergraphs. It turns out that even in the case of 3-uniform hypergraphs there are a few different ways of approaching this problem, as cycles and degrees can be defined in multiple ways.