abstract

COMPUTER SCIENCE/DISCRETE MATH II
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

A 3-uniform hypergraph is hamiltonian if for some cyclic ordering of its vertex set, every 3 consecutive vertices form an edge. In 1952 Dirac proved that if the minimum degree in an n-vertex graph is at least n/2 then the graph is hamiltonian. We prove an analogous result for uniform hypergraphs: For all n large enough, a sufficient condition for an n-vertex 3-uniform hypergraph to be hamiltonian is that each 2-element set of vertices is contained in at least n/2 edges. Joint work with Vojtech Rodl and Andrzej Rucinski.