Some results on spectral radius of hypergraphs

Yuan Hou

Fuzhou University

Abstract

Spectral extremal hypergraph theory via tensors is the subset of extremal problems, where invariants are based on the eigenvalues or eigenvectors of a hypergraphs.The most natural such invariant is the maximal absolute value of the eigenvalues of the adjacency tensor of a hypergraph, called its spectral radius. In this talk, we present some recent results about the spectral analogue of a hypergraph extremal results via tensors, including codegree, walks and transversal number.(Join work with An Chang).

Keywords: hypergraph; tensor product; spectral radius; walk; transversal number

E-mail address: houyuan@fzu.edu.cn