

2-connected hypergraphs with no long cycles

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Abstract

The Erdős–Gallai theorem gives an upper bound for the maximum number of edges in an n -vertex graph with no cycle of length k or longer. Recently, many analogous results for r -uniform hypergraphs with no Berge cycle of length k or longer have appeared. In this talk, we present a result for 2-connected hypergraphs without long Berge cycles. For n large with respect to r and k , our bound is sharp and is significantly stronger than the bound without restrictions on connectivity.

This is joint work with Zoltan Füredi and Alexandr Kostochka.