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Uniform Turán density of 3-uniform hypergraphs

The uniform Turán density of a hypergraph H is the infimum of all d such that every sufficiently large hypergraph H_0 such that every linear size induced subhypergraph of H_0 has density at least d contains H as a subhypergraph. In addition to the classification of 3-uniform hypergraph with uniform Turán density equal to zero by Reiher, Rödl and Schacht [J. London Math. Soc. 97 (2018), 77-97], the only additional 3-uniform hypergraphs whose uniform Turán density is known are K_4^- . In this talk, we determine the uniform Turán density of several families of 3-uniform hypergraphs, in particular, we present a specific family of 3-uniform hypergraphs with uniform Turán density equal to $1/27$.