

Discrete Mathematics Seminar

Illinois State University

2:00–2:50 pm, November 7@ STV 121

Speaker: Saad El-Zanati, Illinois State University

On k -factorizations of uniform hypergraphs of small order

A k -factorization of the complete t -uniform hypergraph $K_v^{(t)}$ is an H -decomposition of $K_v^{(t)}$ where H is a k -regular spanning subgraph of $K_v^{(t)}$. For small values of v , we generate 2-regular and 3-regular spanning subhypergraphs of $K_v^{(3)}$ and investigate which of these subhypergraphs factorize $K_v^{(3)}$ or $K_v^{(3)} - I$, where I is a 1-factor.

This is joint work with Peter Adams, Peter Florido, and William Turner.

