

Decomposition of complete graphs into unicyclic triangular disconnected graphs on seven edges

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(joint work with Aidan Carlson)

A *G*-decomposition of the complete graph K_n is a collection of subgraphs G_i , $i \in [s]$, all isomorphic to G , such that every edge of K_n appears in precisely one copy G_i . It is also often called a *G*-design.

We continue our quest for finding the complete decomposition spectrum for graphs with up to eight edges. In this talk, our graphs will be unicyclic triangular disconnected graphs on seven edges.

We use a mix of classical methods and their recent modifications and generalizations to determine the spectrum for these graphs completely.