

Decomposition of the Johnson Graphs into Graph-Pairs of order 4

Atif Abueida*, Mike Daven*, University of Dayton, Mount Saint Mary College

The Johnson graphs, $J(v, n)$, are special graphs defined on the subsets of a given set. The vertices of $J(v, n)$ are the n -element subsets of a v -element set and two vertices are adjacent when the intersection of the two subsets (vertices) contains $(n - 1)$ elements. In this talk we show the necessary and sufficient conditions for the decomposition of $J(v, n)$ into copies of C_4 and $2K_2$ for certain value of v and n .

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