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Cops and Robber on Circulant Graphs

From a result of Frankl (1987) on the copnumber of Cayley graphs, it is know that the copnumber of any 4-regular Circulant graph is at most 3. In this talk, characterizations of 4-regular circulant graphs of copnumber 1, 2, and 3, respectively, will be given. Through the use of wreath products, the copnumbers of additional classes of circulant graphs can then be determined. Finally, as a consequence of expressing Circulant graphs in terms of wreath products, a characterization of tandem-win circulant graphs is found.