

ON SOME RECENT RESULTS ON DISTANCE-BIREGULAR GRAPHS

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Abstract

Let Γ be a connected bipartite graph with vertex set partitioned as $Y \cup Y'$. The graph Γ is called *distance-biregular* if, for any pair of vertices u and v , the number of neighbors of v that lie closer to u depends only on the distance $d(u, v)$ and on whether u belongs to Y or to Y' .

In this talk, we present recent results on distance-biregular graphs, specifically the classification of 2- Y -homogeneous (Y, Y') -distance-biregular graphs with eccentricity $D \in \{3, 4, 5\}$.

The talk is based on joint work with colleagues from the University of Primorska, Blas Fernández and Safet Penjić, and the University of Rijeka, Marija Maksimović and Emma Šepić.

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