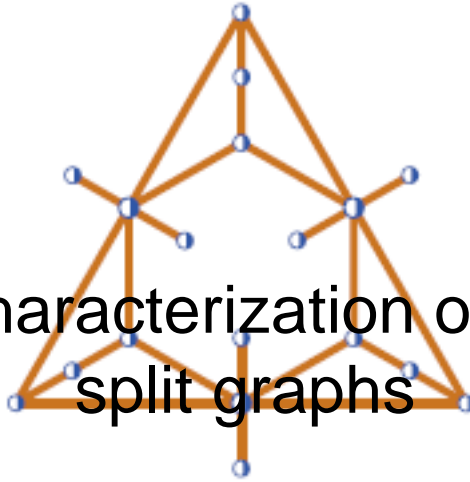


Bled'11 - 7th Slovenian International Conference on Graph Theory

Contribution ID : 219

Spectral characterization of families of split graphs



Content :

An upper bound for the sum of the squares of the entries of the principal eigenvector corresponding to a vertex subset inducing a k -regular subgraph is introduced and applied to the determination of an upper bound on the order of such induced subgraphs.

Furthermore, for some connected graphs we establish a lower bound for the sum of squares of the entries of the principal eigenvector corresponding to the vertices of an independent set. Moreover, a spectral characterization of families of split graphs, involving its index and the entries of the principal eigenvector corresponding to the vertices of the maximum independent set is given. In particular, the complete split graph case is highlighted.

Primary authors : Mrs. ANDELIC, Milica (University of Aveiro, Portugal)

Co-authors : Mr. CARDOSO, Domingos (University of Aveiro, Portugal)

Presenter : Mrs. ANDELIC, Milica (University of Aveiro, Portugal)

Session classification : --not yet classified--

Track classification : Graph Spectra and its Applications

Type : Oral presentation