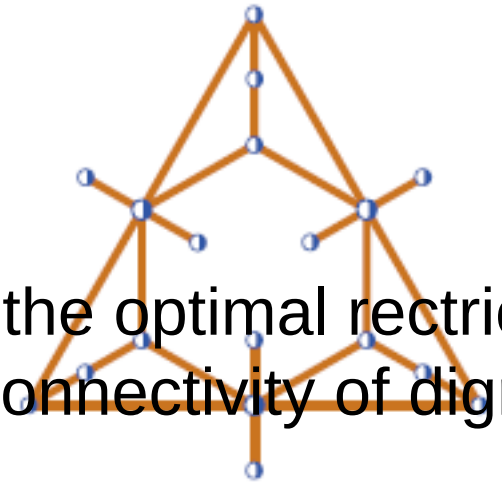
Bled'11 - 7th Slovenian International Conference on Graph Theory

Contribution ID : 167



On the optimal rectricted arc-connectivity of digraphs

Content :

For a strongly connected digraph D the restricted arc-connectivity $\lambda'(D)$ is defined as the minimum cardinality of an arc-cut over all arc-cuts S satisfying that $D-S$ has a non trivial strong component D_1 such that $D-V(D_1)$ contains an arc. In this work we prove that every digraph on at least 4 vertices and of minimum degree at least 2 is λ'-connected and $\lambda'(D)\le \xi'(D)$, where $\xi'(D) $ is the minimum arc-degree of D. Also we introduce the notion of super-λ' digraphs and provide a sufficient condition for a s-geodetic digraph to be super-λ'.

Primary authors : Dr. GARCIA VAZQUEZ, Pedro (Universidad de Sevilla)

Co-authors : Prof. BALBUENA, Camino (Universitat Politècnica de Catalunya) ; Dr. HANSBERG, Adriana (Universitat Politècnica de Catalunya) ; Mr. MONTEJANO, Luis Pedro (Universitat Politècnica de Catalunya)

Presenter : Dr. GARCIA VAZQUEZ, Pedro (Universidad de Sevilla)

Session classification : --not yet classified--

Track classification : General session

Type : Oral presentation