

AVVISO

Il prossimo Martedì 19 Settembre alle ore 10:30 aula n. 39 DIMIE il prof. **Luciano Grippo** dell'Università Nacional de General Sarmiento – Buenos Aires (Argentina) terrà un seminario di circa un'ora dal titolo

Converging graphs with convex sets and partitioning graphs into convex sets

Abstract

Convexities in graphs have been widely studied in the last years. Several articles can be found in the literature dealing with algorithmic and complexity issues of parameters related to convexities in graphs. Interesting enough is to compare the behavior of these parameters under different convexities from an algorithmic and complexity point of view.

If \mathcal{P} is a set of paths in a graph G and \mathcal{C} is the collection of all subsets S of $V(G)$ such that, for every $P \in \mathcal{P}$ whose end-vertices belong to S , every vertex of P belongs to S , then \mathcal{C} is a graph convexity. The monophonic convexity, the P_3^* -convexity, and the P_3 -convexity are the convexities whose convex sets are generated by induced paths, induced paths of length two, and paths of length two of the graph, respectively. The convex sets of a graph G under the digital convexity are those sets S of G such that for every vertex $v \in V(G)$, if $N_G[v] \subseteq N_G[S]$, then $v \in S$.

Given a graph G , the problems of 'partitioning G into p convex sets' and 'covering G with p convex sets' were introduced in 2011 by Artigas et al. In this talk some algorithmic and complexity results for both problems, under all of these convexities, will be presented.

I colleghi e gli studenti interessati sono invitati a partecipare.



27/12/11