

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

Contribution ID : 230



## Triple intersection numbers in distance-regular graphs

### Content :

A graph is said to be  $t$ -tuple regular if, for any set  $S$  of vertices with  $|S| \leq t$ , the number of common neighbours of  $S$  depends only on the isomorphism type of the induced subgraph on  $S$ . It follows immediately that a graph is 1-tuple regular iff it is regular, and it is 2-tuple regular iff it is strongly regular. Cameron and Van Lint studied 3-tuple regular graphs, and they characterized them with strongly regular graphs that have strongly regular subconstituents. We generalize their study to distance-regular graphs and investigate triple intersection numbers. Some of the results in this talk are a joint work with Paul Terwilliger and/or Jack Koolen.

**Primary authors :** Mr. JURISIC, Aleksandar (FRI/IMFM)

**Co-authors :**

**Presenter :** Mr. JURISIC, Aleksandar (FRI/IMFM)

**Session classification :** --not yet classified--

**Track classification :** Representations of Graphs

**Type :** Oral presentation