Meeting: 998, Houston, Texas, SS 1A, Special Session on Graph Theory and Combinatorics

998-05-346 **Hortensia Galeana-Sánchez*** (hgaleana@math.unam.mx). *Kernels by monochromatic paths in tournaments and bipartite tournaments.*

We call the digraph D an m-coloured digraph if the arcs of D are coloured with m colours.

A set $N \subseteq V(D)$ is said to be a kernel monchromatic paths if it satisfies the following two conditions:

(i) for every pair of different vertices $u, v \in N$ there is no monochromatic directed path between them and;

(ii) for every vertex $x \in (V(D) - N)$ there is a vertex $y \in N$ such that there is an x, y-monochromatic directed path.

In this talk we survey sufficient conditions for an m-coloured tournament (or bipartite tournament) to have a kernel by monochromatic paths. (Received March 02, 2004)