

Gregarious Cycle Systems

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A gregarious cycle in a multipartite graph is one all of whose vertices lie in different partite sets of the graph.

I shall bring the listener up-to-date with the present state of play regarding gregarious cycle decompositions, and will include several open problems. The concept of a gregarious cycle was conceived during a visit to Auburn University, and has been nurtured during subsequent visits, so it seems an appropriate topic for this conference; I doubt these would exist without the splendid hospitality of Curt Lindner.

This will include joint work with Nicholas Cavenagh, Dean Hoffman, David Pike, Chris Rodger and Benjamin Smith.

MSC2000: 05B40.

Keywords: complete partite graph; cycle decomposition; gregarious cycles.