

1022-05-150

Paul N Balister* (pbalistr@memphis.edu), Department of Math Sciences, 373 Dunn Hall,
University of Memphis, Memphis, TN 38152, and **Bela Bollobas**. *Pair dominating graphs*.

We say an oriented graph G dominates pairs if for every pair of vertices u and v , there exists a vertex w such that the edges \vec{wu} and \vec{wv} both lie in G . We give several constructions of regular oriented-triangle free graphs with this property, and thereby we disprove a conjecture of Myers. We also construct oriented graphs for which each pair of vertices is dominated by a unique vertex, and oriented graphs for which each r -tuple is dominated by a unique vertex. (Received September 12, 2006)