

Maximum induced matching of hexagonal graphs

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A *matching* in a graph is a set of edges no two of which share a common vertex. A matching is an *induced matching* if no two edges in the matching have a third edge in the graph connecting them. The problem of finding a maximum induced matching or shortly MIM problem is known to be NP-hard in general and it remains so even when the input graph is bipartite. On the other hand the problem has been shown to be polynomial for some special sets of graphs. In this talk tight upper and lower bounds on maximum induced matching in a special subset of planar graphs, called *hexagonal graphs*, will be presented.