Packing cycles and unicyclic graphs into planar graphs

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Abstract

In [2] A. Garcia, C. Hernando, F. Hurtado, M. Noy and J. Tehel have established the existence of packing of two copies of trees into planar graph. We show the existence of packing into planar graph of two copies of cycles, of any order with the exceptions of C_5 and C_7. We also provide methods for obtaining packing into planar graph of two copies of unicyclic graphs in some specific cases using a construction of M. Woźniak [5] for packing trees into planar graph.