

1107-05-398

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A direct construction of a self-dual embedding of the complete bipartite graph $K_{4m,4n}$ in an orientable pseudosurface is given for an infinite number of values of m and n . These embeddings are shown to maximize the number of umbrellas at each vertex. A surgery of Edmonds is then applied to build self-dual embeddings of $K_{4m,4n}$ in nonorientable pseudosurfaces with fewer umbrellas. If time permits, a new and relevant surgery will be described. (Received January 19, 2015)