

# Face antimagic evaluation of graphs

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**Dedicated to Mirka Miller**

This talk deals with the problem of labeling the vertices, edges and faces of a plane graph. A weight of a face is the sum of the label of a face and the labels of the vertices and edges surrounding that face. In a super  $d$ -antimagic labeling the vertices receive the smallest labels and the weights of all  $s$ -sided faces constitute an arithmetic progression of difference  $d$ , for each  $s$  that appearing in the graph.

Together with Mirka Miller we started to study the face antimagic labelings in 2000. Now we survey obtained results on this topic and provide a summary of current open problems.

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