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*Types of edges in embedded graphs with minimum degree 2*

The weight  $w(e)$  of an edge  $e$  is the degree-sum of its end-vertices. An edge  $e = uv$  is of type  $(i, j)$  if  $\deg(u) \leq i$  and  $\deg(v) \leq j$ . Kotzig proved that every 3-connected plane graph contains an edge of weight at most 13. Ivančo described bounds for weights of edges in the class of graphs embeddable on the orientable surfaces with higher genus. Jendroř and Tuhársky investigated the weight of edges in the class of graphs embeddable on the nonorientable surfaces with higher genus. Later Jendroř, Tuhársky and Voss described exact types of edges in large embedded maps with minimum degree 3.

In the talk we describe types of edges in connected embedded graphs with minimum degree at least 2, minimum face size at least 3 and sufficiently large number of vertices. We will also discuss the quality of our results.