A list orientation of graphs

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For a list L of a graph G with $L(v) \subseteq \{0, 1, \ldots, \deg_G(v)\}$ for each vertex v, an L-orientation of G is one such that the outdegree of each vertex v is contained in the list L(v). In this talk, we discuss the existence of an L-orientation. In particular, we apply a polynomial method to plane graphs to find an L-orientation if the list L satisfies certain conditions.