1162-05-165 **Marthe Bonamy**, **Michelle Delcourt**, **Richard Lang** and **Luke Postle*** (`lpostle@uwaterloo.ca`). *Edge Coloring with Local List Sizes.*

The well-known List Colouring Conjecture from the 1970s states that for every graph $G$ the chromatic index of $G$ is equal to its list chromatic index. In a seminal paper in 1996, Kahn proved that the List Colouring Conjecture holds asymptotically. Our main result is a local generalization of Kahn's theorem. More precisely, we show that, for a graph $G$ with sufficiently large maximum degree $\Delta$ and minimum degree $\delta \geq \ln^{25} \Delta$, the following holds: For every assignment of lists of colours to the edges of $G$, such that $|L(e)| \geq (1 + o(1)) \cdot \max \{\deg(u), \deg(v)\}$ for each edge $e = uv$, there is an $L$-edge-colouring of $G$. Furthermore, Kahn showed that the List Colouring Conjecture holds asymptotically for linear, $k$-uniform hypergraphs, and recently Molloy generalized this to correspondence colouring. We also prove a local version of Molloy's result. In fact, we prove a weighted version that simultaneously implies all of our results. (Received August 31, 2020)