Triangles in tripartite graphs

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Mantel's theorem (1907) says that a graph with n vertices and more than $n^2/4$ edges must contain a triangle. Over a century later Razborov gave a quantitative version of this result. He determined the minimal proportion of triangles present in a graph of given density.

I will talk about the analogues of these results for tripartite graphs. This is joint work with Rahil Baber and Robert Johnson.