Removing Crossings

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When drawing a graph, typically you want to avoid having edges cross. Sometimes drawings have "unnecessary" crossings, for example, as seen in the remarkable theorem of Hanani and Tutte:

If a graph is drawn such that every pair of edges crosses evenly, then the graph can be redrawn with no crossings.

There are many results of this nature by Cairns, Nikoleyevsky, Pach, Schaefer, Stefankovic, Toth, Valtr, the speaker, and others. We will survey results, proof techniques, and open problems.



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