

On the theorems of Menger and Kuratowski

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Abstract

Menger's theorem from 1927 on (internally) disjoint paths is one of the most basic tools in graph theory, and there several proofs. It seems less known that the theorem has also enjoyed some attention in topology. In the talk I survey some of the topological versions and present a new general version (joint with Antoine Vella). I also discuss the analogous linkage problem. To deal with this we need a topological version of another fundamental result in graph theory: Kuratowski's theorem.