The Minimal universal minor closed classes of series-parallel graphs

Yared Nigussie Katedra Aplikované Matematiky Universita Karlova

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Abstract

A class K of graphs ordered by the homomorphism relation is said to be *universal* if every countable partial order can be represented by K. Let SPG denote the class of series-parallel graphs (K_4 -minor-free graphs). A method of constructing various minimal universal minor closed subclasses of SPG was developed by Hubicka, Nesetril and YN. They asked if all of the minimal universal subclasses of SPG can be found. We give a positive answer to this question by listing them. This is a joint work with J. Nesetril and L. Stevens.