Finitely forcible graphons and permutons

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Abstract

We investigate when limits of graphs (graphons) and permutations (permutons) are uniquely determined by finitely many densities of their substructures, i.e., when they are finitely forcible. Every permuton can be associated with a graphon through the notion of permutation graphs. We find permutons that are finitely forcible but the associated graphons are not. We also show that all permutons that can be expressed as a finite combination of monotone permutons and quasirandom permutons are finitely forcible, which is the permuton counterpart of the result of Lovász and Sós for graphons.

The talk is based on results obtained jointly with Roman Glebov, Andrzej Grzesik and Tereza Klimošová.

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