

Descriptive Graph Combinatorics

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This talk is about a relatively new subject, developed in the last two decades or so, which is at the interface of descriptive set theory and graph theory but also has interesting connections with other areas such as ergodic theory and probability theory.

The object of study is the theory of definable graphs, usually Borel or analytic, on Polish spaces and one investigates how combinatorial concepts, such as colorings and matchings, behave under definability constraints, i.e., when they are required to be definable or perhaps well-behaved in the topological or measure theoretic sense.

