Polynomial χ-Binding Functions for Graphs with Forbidden Configurations

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Abstract

A graph G is said to be H-free if it contains no induced subgraph isomorphic to H. A family of graphs $\mathcal{G}$ is said to be χ-bounded if there exists some function f such that $\chi(G) \leq f(\omega(G))$ for every $G \in \mathcal{G}$, and f is said to be the binding function of $\mathcal{G}$. In this talk, we will talk about the binding functions of graphs with some specific forbidden configurations, and we present some resent results on coloring P_5-free graphs.

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