Coloring minor-closed families coarsely

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Abstract

Minor-closed families are classes of graphs closed under three of the most fundamental operations: vertex-deletion, edge-deletion and edge-contraction. In this talk, we consider results on coloring minor-closed families so that the monochromatic components have bounded maximum degree, bounded weak diameter or bounded size, respectively. Those results are related to Hadwiger's conjecture, which addresses proper coloring of minor-closed families. Some of them lead to applications in metric geometry.

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