COVERING GRAPHS BY RAINBOW FORESTS

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Let G be a graph with a (not necessarily proper) coloring of its edges such that the size of each color class is at most m. We call a subgraph of G *rainbow* if it contains at most one edge of each color. We discuss results and problems related to the following question: If the edges of G can be covered by k forests, what is the least number of rainbow forests covering the edge set of G?

The talk is based on joint work with Matthias Kriesell.