Extremal Problems with Forbidden Color Classes

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What happens when we forbid particular colorings of some graph F, in a large properly edge-colored host graph G? Does G just resemble a graph with all copies of F forbidden? If we request that G is edge-maximal, do we find traditional F-saturated graphs, or do the details of the coloring lead to different extremal graphs? We'll discuss some of the history of this variant of the classical forbidden subgraph problem, and present some new results for trees when the forbidden colorings are rainbow (or nearly rainbow). This is joint work with Vic Bednar (VCU) and Moheng Zhang (VCU).