

The conflict-free hypergraph matching method and generalized Ramsey numbers
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In this talk, I will describe a method for proving upper bounds on Erdős–Gyárfás generalized Ramsey numbers introduced recently by Mubayi and Joos. Using a powerful new tool for finding a “conflict-free” matching in an appropriate auxiliary hypergraph, they determined the asymptotics of $f(n, 4, 5)$ among other results. I will discuss this approach and how it can be adapted to give new upper bounds on other generalized Ramsey numbers.