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Vindya Bhat* (vbhat@cims.nyu.edu), 251 Mercer Street Office, Warren Weaver Hall Office 722, Courant Institute of Mathematical Sciences, New York, NY 10012, and **Jaroslav Nešetřil**, **Christian Reiher** and **Vojtěch Rödl**. *A Ramsey class for Steiner systems*.

We construct a Ramsey class whose objects are Steiner systems. In contrast to the situation with general r -uniform hypergraphs, it turns out that simply putting linear orders on their sets of vertices is not enough for this purpose: one also has to strengthen the notion of subobjects used from “induced subsystems” to something we call “strongly induced subsystems”.

Moreover we study the Ramsey properties of other classes of Steiner systems obtained from this class by either forgetting the order or by working with the usual notion of subsystems. This leads to a perhaps surprising induced Ramsey theorem in which designs get colored. (Received September 20, 2016)