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Title: Some interactions of Model theory and Ramsey theory

In this talk I will introduce the definition of a generalized indiscernible sequence and illustrate the role it plays in results in model theory and Ramsey theory. A first-order structure is an underlying set together with certain basic functions and relations on this set (the number and arities of which are encoded in the language of the structure.) A generalized indiscernible sequence is a tool to connect two first-order structures, say I and M, where these structures are in possibly different languages. The indiscernible sequence can be thought of as an injection $f : I \to M^k$ with a certain homogeneity property: for any integer n, whenever n-tuples $\bar{\imath}, \bar{\jmath}$ are indistinguishable by the basic relations in I, then no definable relation in M distinguishes the $n \cdot k$-tuples $f(\bar{\imath}), f(\bar{\jmath})$. I will present a theorem that relates a desirable property of I-indexed indiscernible sequences called the *modeling property* with the Ramsey property for a certain class of finite structures.