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Recurrent big Ramsey structures

This talk primarily serves as an introduction to the concept of a big Ramsey structure, an expansion of a given infinite structure which correctly encodes the big Ramsey degrees of every finite substructure. While a priori there is no reason to expect that finite big Ramsey degrees implies the existence of a big Ramsey structure, this happens in every known example. Not only that, but for almost all known examples, one can build big Ramsey structures with further desirable properties, such as recurrence. In recent joint work with Jan Hubicka, we shed some light on why this is, proving a result of the form that any proof of finite big Ramsey degrees using the "standard" methods is guaranteed to imply the existence of a recurrent big Ramsey structure.