

- FELIPE ESTRADA, *Transitive extensions of generic structures*.

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Let \mathcal{M} be a first-order structure with universe M . A transitive extension of \mathcal{M} is a first-order structure \mathcal{N} on $M \cup \{0\}$, where 0 is a new element, such that $\text{Aut}(\mathcal{N})$ extends $\text{Aut}(\mathcal{M})$ in the sense that the stabilizer of $\text{Aut}(\mathcal{N})$ with respect to 0 is the same permutation group as $\text{Aut}(\mathcal{M})$, and such that $\text{Aut}(\mathcal{N})$ is transitive.

Transitive extensions have been explored extensively, for instance by Biggs and White [1], but largely when restricted to finite permutation groups. In this talk, I will present original results and techniques regarding the existence or non-existence of transitive extensions for several infinite first-order relational structures which are generic in the Fraïssé sense, namely graphs and hypergraphs, tournaments and hypertournaments, equivalence relations, and several natural expansions of C -sets.

[1] BIGGS, NORMAN AND WHITE, ARTHUR, *Permutation groups and combinatorial structures*, London Mathematical Society Lecture Note Series, Volume 33 Cambridge University Press, 1979.