SOME COUNTABLE RADO-LIKE GRAPHS VIA FRAISSE LIMITS

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Given graph G and $v \in G$ we denote $N_v = \{g \in G : vEg\}$, $N_v^c = G \backslash (N_v) \cup \{v\}$, where vEg means there is an edge between v and g. We say that a graph G has the NN^c property if for every $v \in G$ both N_v, N_v^c are isomorphic with G. In 2003 Bonato asked if NN^c is a property which characterizes the Rado Graph. In 2010 Gordinowicz gave negative answer to this question by constructing a proper example. During my talk I will describe Gordinowicz's construction in the language of Fraisse limits, providing $2 \cdot \omega \cdot \mathfrak{c}$ pairwise non-isomorphic NN^c graphs which are not isomorphic with the Rado graph. This is part of ongoing work with Agnieszka Widz and Szymon Głąb.

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