OPERAD GROUPS – A NEW FRAMEWORK FOR THOMPSON-ESQUE GROUPS

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Abstract. In this talk I want to present a class of groups which contains the classical Thompson groups F and V as well as a lot of other Thompson-like groups which have been studied in the literature so far. The main device to define these groups are discrete operads, i.e. operads in the category of sets. The main motivation for introducing them is to provide a general as possible framework to investigate topological finiteness properties of Thompson-like groups, most notably property type F_∞. I will present a result in this direction which I have obtained in my PhD thesis and which generalizes several existing proofs. If time permits, I will also discuss results concerning group homology. This yields corollaries for l^2-homology which are in some sense connected to Gromov's zero-in-the-spectrum conjecture.

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