

Simple transitive 2-representations of finitary 2-categories

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We introduce a new class of finitary 2-representations for finitary 2-categories called simple transitive 2-representations which we think is a proper 2-analogue of usual irreducible representations of algebras. For these 2-representations we describe a weak version of the Jordan—Holder theory and provide a classification of such 2-representations over a rather general family of finitary 2-categories. The latter family includes the 2-category of Soergel bimodules in type A and finitary quotients of certain 2-Kac—Moody algebras.

Joint work with Vanessa Miemietz.

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