

# Coupling of matter to gravity using higher gauge theory

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We will report on the latest advances within the program of generalized spinfoam models using the framework of higher gauge theory. This framework, based on the idea of describing gauge symmetry using 2-groups, 3-groups and other higher-order categorical structures, has the advantage of treating both matter and gravity on an equal footing, which allows us to discuss matter-related topics such as the Higgs mechanism in the context of generalized spinfoam models.

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