The 8th Conference of the Polish Society on Relativity



Contribution ID : 42 Type : not specified

Matter fields in loop quantum gravity

Thursday, 22 September 2022 09:40 (20)

The talk concerns the current status of matter fields in the framework of loop quantum gravity, with an emphasis on the recent developments. The presentation will particularly focus on the r-Fock representations and their relation to the standard loop representations, in light of the recent generalization of the construction of r-Fock measures to SU(N) gauge theories, and how one could try bridging the gap between quantum field theory on Minkowski spacetime and the background independent framework of loop quantum gravity.

Presenter(s): ASSANIOUSSI, Mehdi (Faculty of Physics, University of Warsaw)