## The 8th Conference of the Polish Society on Relativity



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## Matter fields in loop quantum gravity

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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 )