

## **QED in Ashtekar-Barbero variables and its implications**

*Thursday 10 July 2025 12:05 (20 minutes)*

We explore the modifications to fundamental geometric variables of Loop Gravity induced by the presence of fermions, and examine the resulting gravitational dynamics. This analysis is then extended to incorporate Quantum Electrodynamics (QED). Finally, we discuss potential approaches for quantizing the system, outlining possible directions for future research.

### **Working Group**

WG1 - High Energy QG Theory

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