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Functorial quantization in spacetime

I consider an abstract definition of both classical and quantum field theory in not necessarily metric spacetime. In the classical case this is built on Lagrangian field theory as developed by Kijowski and Tulczyjew. In the quantum case this is based on the framework of topological quantum field theory pioneered by Witten, Segal and Atiyah. The problem of quantization in this setting is much richer than ordinary canonical quantization. I shall concentrate on the simplest case of linear field theory. In this case a rigorous and functorial quantization scheme exists, based on geometric quantization and the Feynman path integral.