

General covariance and dynamics with a Gauss law

Friday 10 May 2024 15:00 (15 minutes)

A 4-dimensional generally covariant gauge theory with local degrees of freedom is presented. It leads to the Gauss constraint but lacks both the Hamiltonian and spatial diffeomorphism constraints. The canonical theory therefore resembles Yang-Mills theory without the Hamiltonian. We describe its observables, quantization, and some generalizations.

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