

Contribution ID: 4346 Type: Oral Competition (Graduate Student) / Compétition orale (Étudiant(e) du 2e ou 3e cycle)

(G*) General covariance and dynamics with a Gauss law

Tuesday 28 May 2024 15:30 (15 minutes)

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

Keyword-1

general covariance

Keyword-2

gauge theory

Keyword-3

Primary authors: MEHMOOD, Hassan (University of New Brunswick); HUSAIN, Viqar (University of New

Brunswick)

Presenter: MEHMOOD, Hassan (University of New Brunswick)

Session Classification: (DTP) T2-2 Theoretical and Mathematical Physics | Physique théorique et

mathématique (DPT)

Track Classification: Technical Sessions / Sessions techniques: Theoretical Physics / Physique théorique (DTP-DPT)