

Spanish and Portuguese Relativity Meeting



Contribution ID: 42

Type: **not specified**

The self dual action: Ashtekar variables without gauge fixing

Wednesday 24 July 2024 12:00 (20 minutes)

I will discuss how to use the GNH method to study the Hamiltonian formulation of the Euclidean self-dual action. This action can be used to arrive at the complex Ashtekar formulation for Lorentzian General Relativity or a real connection formulation for Euclidean General Relativity. I will show how one can get the Ashtekar formulation for Euclidean gravity without using any gauge fixing and compare this derivation with the one corresponding to the Holst action.

Primary authors: Prof. SÁNCHEZ VILLASEÑOR, Eduardo Jesús (Universidad Carlos III, Madrid); BARBERO GONZALEZ, Jesus Fernando (Instituto de Estructura de la Materia-CSIC); Dr BASQUENS MUÑOZ, Marc (KTH-S-tokholm)

Presenter: BARBERO GONZALEZ, Jesus Fernando (Instituto de Estructura de la Materia-CSIC)