

Application of the Curvature operator: Matrix Elements and properties of the new Hamiltonian Constraint operator in LQG

Mehdi Assanioussi*

Institute of Theoretical physics, University of Warsaw

E-mail: mehdi.assanioussi@fuw.edu.pl

This talk is a presentation of an ongoing work based on [1] of the same authors. In this work we study properties of the Lorentzian Hamiltonian constraint operator expressed using the curvature operator introduced in [1] and we evaluate its action.

References

[1] E. Alesci, M. Assanioussi and J. Lewandowski, *A curvature operator for LQG*, Submitted for publication in Phys. Rev. D [arxiv: 1403.3190v2].

Frontiers of Fundamental Physics 14 - FFP14,

15-18 July 2014

Aix Marseille University (AMU) Saint-Charles Campus, Marseille

*Speaker.