Poster Session #C
Gravity theories

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Gravity waves in parity-violating Copernican Universes

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In recent works a minimal theory of varying cosmological constant has been proposed. This was achieved by admitting a nontrivial background torsion, which, in case of homogeneous and isotropic solutions, may contain a parity violating piece. In this talk I will present findings from our recent paper DOI:10.1103/PhysRevD.102.044039. There we analyzed the linear tensor perturbations of these models. We demonstrated that the propagation of gravitational waves is dramatically different in the parity violating branch. Right and left handed gravitons acquire an effective mass and propagate with different speeds. In certain exotic limits their evolution is left undetermined. By comparing our findings with observations we put constraints on these theories.