

Low dimensional Lie groups with cyclic Lorentzian metrics

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ABSTRACT

Cyclic metrics on Lie groups can be considered as those metrics as far as possible from bi-invariant metrics. The name comes from the expression of the condition imposed on the corresponding homogeneous structure tensor. In the Riemannian framework, several rigidity results on cyclic metrics can be found in the literature. This talk will describe the counterpart for Lorentzian metrics on Lie groups of dimensions 3 and 4, which turn out to have a very different behaviour with respect to the metrics of positive signature.

This is a joint work with G. Calvaruso.