
Frobenius analysis and the solutions in quadratic gravity

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Abstract

The classification of the spherically symmetric space-times in the Stelle quadratic gravity has been known for some time based on the Frobenius analysis. However, this analysis depends on the coordinates used. Thus, the question of whether the classification is complete arises. We show that the Frobenius method could be improved further. Namely, it is possible to obtain new solutions and generalise the conditions of the previously known solutions.

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