

Analytical Black Hole Solution in dRGT Massive Gravity

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Massive gravity is a modified gravity in which a mass is given to the spin-2 field. There are various kinds of massive gravity models. One of viable model which is received enormous attention to investigate in cosmology is “dRGT massive gravity”. Since it is a gravity theory, it must reduce to general relativity at Solar system scale. Black hole solution is one of well-known solutions in general relativity at this scale. In this presentation, we try to find an analytical black hole solution in dRGT massive gravity. It is found that the solution can be recover various kind of black hole solutions, for example dS/AdS black hole, black hole with global monopole. We also argue that it is possible to obtain regular black hole from dRGT massive gravity.

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