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Title:	BTZ black holes in massive gravity
Authors:	Dey, Sanjib (/jspui/browse?type=author&value=Dey%2C+Sanjib)
Keywords:	BTZ Black holes Massive gravity
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Abstract:	We analyze certain aspects of BTZ black holes in massive theory of gravity. The black hole solution is obtained by using the Vainshtein and dRGT mechanism, which is asymptotically AdS with an electric charge. We study the Hawking radiation using the tunneling formalism as well as analyze the black hole chemistry for such system. Subsequently, we use the thermodynamic pressure-volume diagram to explore the efficiency of the Carnot heat engine for this system. Some of the important features arising from our solution include the non-existence of quantum effects, critical Van der Walls behaviour, thermal fluctuations and instabilities. Moreover, our solution violates the Reverse Isoperimetric Inequality and, thus, the black hole is super-entropic, perhaps which turns out to be the most interesting characteristics of the BTZ black hole in massive gravity.
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