

# Rotating BTZ black hole assuming running couplings

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## ABSTRACT

*In the present work a generalization of the rotating BTZ black hole for the case of scale dependent couplings is studied. One starts by using the effective action for scale dependence couplings to derive a generalization of the corresponding Einstein field equations. Moreover, one obtains new solutions for lapse function, cosmological coupling and Newtons coupling. In addition, we show the effect of scale dependent couplings on the classical solution. Besides, asymptotic behaviour as well as thermodynamic properties were computed in detail.*

## References

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