CORRIGENDUM

Corrigendum: Backreaction in the future behavior of an expanding vacuum spacetime (2018 Class. Quantum Grav. 35 035010)

To cite this article: John Lott 2018 Class. Quantum Grav. 35 089501

View the article online for updates and enhancements.
Corrigendum: Backreaction in the future behavior of an expanding vacuum spacetime (2018 Class. Quantum Grav. 35 035010)

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Received 14 February 2018
Accepted for publication 1 March 2018
Published 16 March 2018

In [2, 3.8] we constructed limiting metrics $g_\infty$ for the rescalings of a class of $T^2$-symmetric vacuum spacetimes. It was shown that $g_\infty$ fails to satisfy the vacuum Einstein equations. It was implicitly stated that $g_\infty$ has a nonvanishing scalar curvature. Cécile Huneau and Jonathan Luk pointed out that the latter statement is incorrect. As mentioned in [2], the equations [1, 2.3–2.8] are satisfied for $g_\infty$ except for [1, 2.6], which gives rise to a nonzero $\hat{G}_{\theta\theta}$-term. However, it also gives rise to a nonzero $\hat{G}_{\bar{\gamma}\bar{\gamma}}$-term. The result is that the scalar curvature vanishes. Consequently, the statement 'We see that the framework of [8] does not apply to our rescaling examples' from [2, p 2] is unjustified.

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References

[1] LeFloch P and Smulevici J 2016 Future asymptotics and geodesic completeness of polarized $T^2$-symmetric spacetimes Anal. PDE 9 363–95