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Erratum

Existence of non-trivial, vacuum, asymptotically simple spacetimes

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We withdraw the claim in section 5 of our letter concerning the addition of Einstein–Rosen bridges. The construction presented in that section does correctly lead to the addition of a Schwarzschild metric in a neighbourhood of a point satisfying a local parity condition. However, the justification we gave of the positivity of mass of the resulting metric is incorrect. When trying to prove our claim we have underestimated one of the error terms. This mistake led us to the approximate equality $m_{\epsilon} \approx m(\epsilon)/\epsilon$ which might be wrong. It follows that the added Schwarzschild might have negative mass, in which case a naked singularity is added to the initial data set. While such an observation seems to be less interesting than the possibility of adding a bridge, it might have some interest of its own.