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Erratum: Probing the holographic dilaton

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Figure 4. Masses $M = \sqrt{-q^2}$ of modes in the circle reduction of Romans theory, as a function of the parameter s_* . All masses are expressed in units of the mass of the lightest tensor mode. The (red) squares represent the tensor modes, the (blue) circles are the scalar modes, computed with the complete, gauge-invariant variables, while the (black) triangles are the scalar modes computed by making use of the probe approximation. We notice that in probe approximation, and for large values of s_* , two of the towers of scalar states become so close to degenerate that in our numerical study we could not resolve them, and they are represented by just one set of points. In the numerical calculations $\rho_1 = 0.001$ and $\rho_2 = 8$.

Errata

1. Equation (3.24) contains a typo, the right-hand-side needs to be divided by 4. The correct equation reads as follows:

$$\omega(\rho) = -\frac{1}{2} \log(\rho) + \frac{e^{-\frac{8\tilde{\phi}}{\sqrt{5}}} \left(-1 + 4e^{\sqrt{5}\tilde{\phi}} + 2e^{2\sqrt{5}\tilde{\phi}} \right) \rho^2}{5 \cdot 2^{7/5}} + \frac{e^{-\frac{16\tilde{\phi}}{\sqrt{5}}} \left(31 - 128e^{\sqrt{5}\tilde{\phi}} + 162e^{2\sqrt{5}\tilde{\phi}} + 76e^{3\sqrt{5}\tilde{\phi}} + 34e^{4\sqrt{5}\tilde{\phi}} \right) \rho^4}{250 \cdot 2^{9/5}} + \mathcal{O}(\rho^6), \quad (3.24)$$

2. Figures 4 and 5 have been improved, and the cutoff artefacts are not visible any more. The caption of figure 5 has been amended accordingly.

Figure 5. Masses $M = \sqrt{-q^2}$ of modes in the torus reduction of maximal $D = 7$ dimensional supergravity, as a function of the parameter s_* . All masses are expressed in units of the mass of the lightest tensor mode. The (red) squares represent the tensor modes, the (blue) circles are the scalar modes, computed with the complete, gauge-invariant variables, while the (black) triangles are the scalar modes computed by making use of the probe approximation. We notice that in the probe approximation, and for large negative values of s_* , two of the towers of scalar state become so close to degenerate that in our numerical study we could not resolve them. In the numerical calculations $\rho_1 = 0.001$ and $\rho_2 = 15$.

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