



On The Inflaton Potential From Antibranes in Warped Throats

<http://www.firstlight.cn> 2010-11-30

We compute the force between a stack of smeared antibranes at the bottom of a warped throat and a stack of smeared branes at some distance up the throat, both for anti-D3 branes and for anti-M2 branes. We perform this calculation in two ways: first, by treating the antibranes as probes in the background sourced by the branes and second, by treating the branes as probes in the candidate background sourced by the antibranes. These two very different calculations yield exactly the same expression for the force, for all values of the brane-antibrane separation. This indicates that the force between a brane and an antibrane is not screened in backgrounds where there is positive charge dissolved in flux, and gives a way to precisely compute the inflaton potential in certain string cosmology scenarios.

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