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## A Collective Quartic for the Composite Higgs from Warped 6D

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We propose a novel mechanism to generate a collective quartic in composite Higgs models. We are inspired by the original little Higgs idea in which a tree level quartic arises from the dimensional reduction of 6-dimensional gauge theory. To connect to CH models, our model is set in warped 6D ( $AdS_5 \times S^1$ ), deconstructed for simplicity into a two site 5D RS model. The size of the quartic is controlled by the ratio of the  $S^1$  and  $AdS$  radii. This leads to an interesting dense spectrum of KK states. In the presence of our independent tree level quartic, the tuning in Composite Higgs model is reduced by a factor of 2-3.

### Summary

Composite Higgs

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