

NEW PERSPECTIVES IN
CONFORMAL FIELD THEORY AND GRAVITY

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The Higgs Branch of Heterotic LSTs Hasse Diagrams and Generalized Symmetries

Wednesday 27 September 2023 15:12 (18 minutes)

We investigate the Higgs Branch of the six dimensional $\mathcal{N} = (1, 0)$ Little String Theories models corresponding to the worldvolume of Heterotic $E_8 \times E_8$ and their T-dual $\text{Spin}(32)/\mathbb{Z}_2$ instantons. Relying on the magnetic quiver technique, we manage to extract a $3d \mathcal{N} = 4$ quiver whose Coulomb Branch moduli space is the same of the Higgs Branch of the six dimensional theory. Therefore, applying the Quiver Subtraction algorithm we engineer the Hasse diagram associated to the Higgs Branch RG flow of the considered LST models, and check that it matches with the F-theory prediction. We propose an algorithm to match T-dual models by keeping tracks of the 2-group structure constant $\hat{\kappa}$ along Higgs branch RG flows starting from parent dual models.

Summary

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