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IIA Perspective On Cascading Gauge Theory

We study the N=1 supersymmetric cascading gauge theory found in type IIB string theory on p regular and M fractional D3-branes at the tip of the conifold, using the T-dual type IIA description. We reproduce the supersymmetric vacuum structure of this theory, and show that the IIA analog of the non-supersymmetric state found by Kachru, Pearson and Verlinde in the IIB description is metastable in string theory, but the barrier for tunneling to the supersymmetric vacuum goes to infinity in the field theory limit. We also comment on the N=2 supersymmetric gauge theory corresponding to regular and fractional D3-branes on a near-singular K3, and clarify the origin of the cascade in this theory.