

Diluting SUSY flavour problem on the Landscape

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We consider an explicit effective field theory example based on the Bousso-Polchinski framework with a large number N of hidden sectors contributing to supersymmetry breaking. Each contribution comes from four form quantized fluxes, multiplied by random couplings. The soft terms in the observable sector in this case become random variables, with mean values and standard deviations which are computable. We show that this setup naturally leads to a solution of the flavor problem in low-energy supersymmetry if N is sufficiently large. We investigate the consequences for flavor violating processes at low-energy and for dark matter.

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