

## HOW TO HIDE A COSMOLOGICAL CONSTANT

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If our universe has a large cosmological constant, would we necessarily know? The obvious answer depends on an assumption of homogeneity, which may fail at the Planck scale if  $\Lambda$  comes from quantum fluctuations. I show that a large set of initial data describe a universe with a “hidden” cosmological constant, with enormous microscopic curvature but a very small macroscopic expansion. Questions about time evolution remain, but it is plausible that this structure reproduces itself in time. Hence our universe may really have a huge cosmological constant, which could generate Planck scale “spacetime foam” while remaining macroscopically invisible.