

Inflation in a Gaussian Random Landscape

- Continuation of work from last year:
<https://www.youtube.com/watch?v=MPdmfLWBn60>
- We approximate the string theory landscape as a random Gaussian function, and search for inflation within it
- It turns out that many properties of the landscape depend on only two parameters: the dimensionality N , and γ , a parameter that describes how turbulent the landscape is

- The inflationary slow-roll parameters are ϵ and η . ϵ is always zero at saddles, so we focus on η .
- It turns out that under the assumptions:
 - 10^{500} minima in the landscape
 - $O(100)$ moduli
 - $V < 10^{-12} M_{\text{pl}}^4$

Slow roll inflation is unlikely, but not impossible. An inflation-viable saddle is 10^{14} less probable than the typical saddle.

