

Abstract Submitted
for the APR05 Meeting of
The American Physical Society

How false vacuum synthesis of a universe sets initial conditions which permit the onset of variations of a nucleation rate per Hubble volume per Hubble time¹ ANDREW BECKWITH, TcSAM/U. of Houston physics department — Using Bogomil'nyi inequality and the vanishing of topological charge at the onset of nucleation of a new universe permits a simpler, more direct insight into how topological defects (kinks and anti kinks) contribute to initial conditions at the onset of inflationary cosmology . Currently, there are few bridges between initial conditions for cosmological inflation and the nucleation of a new universe. This presentation shows how this can be done while still employing Venezianos prescription for forming a link between quanta of length, the magnitude of a dilaton field ϕ and forces gravitational and gauge alike.

¹Article can be viewed at: [arxiv math-ph/0410060](http://arxiv.math-ph/0410060). In review for possible publication at the International Journal of Physics D, World Press Scientific

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Date submitted: 20 Jan 2005

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