Abstract Submitted for the APR06 Meeting of The American Physical Society

Matching Scherrer's k essence argument with alterations of di quark scalar fields permitting an eventual cosmological constant dominated inflationary expansion ANDREW BECKWITH — We previously showed that we can use di-quark pairs as a model of how nucleation of a new universe occurs. We now can construct a model showing evolution from a dark matter dark energy mix to a pure cosmological constant cosmology due to changes in the slope of the resulting scalar field, using much of Scherrer's k-essence model. This same construction permits a use of the speed of sound, in k essence models evolving from zero to one. Having the sound speed eventually reach unity permits matching conventional cosmological constant observations in the aftermath of change of slope of a di-quark pair generated scalar field during the nucleation process of a new universe.

Andrew Beckwith APS

Date submitted: 09 Jan 2006 Electronic form version 1.4