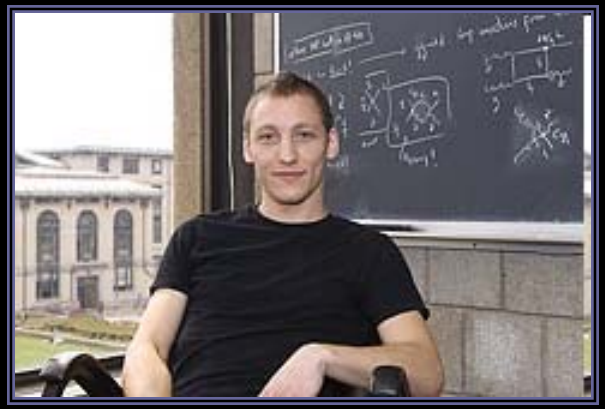
Theory Seminar

Monday, October 24, 2011 2:10 PM 831 Pupin Hall

Dissipative effects during inflation: An effective field theory approach

Using an approach originally developed to study gravitational wave absorption in black hole binary systems, we generalize the EFT of single clock inflation to include dissipative effects. We show that in the presence of dissipation/fluctuation the computation of the power spectrum is significantly modified, and moreover non-gaussianities can be enhanced with respect to the case without additional degrees of freedom by a factor of \gamma/H, where \gamma is the `friction' coefficient. We also discuss the matching of the EFT with a few key examples such as trapped and warm inflation.



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