



NEW YORK CITY COLLEGE OF TECHNOLOGY
Physics Department
Seminar in Theoretical Physics

Inflation from a Bulk Scalar Field

Presented by:

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Friday May 14 at 12:30 PM
Namm 805 (Conference Room in Dean's Office)

Abstract

There are many examples of Kaluza-Klein models where the extra dimensions have both a large volume and a large mass gap. These compactifications can help explain the weakness of four-dimensional gravity. After reviewing the mathematical constructions I will show that these compactifications can also help drive inflation, since a bulk scalar field in these models naturally acquires a potential of the desired form.