



ΤΜΗΜΑ ΦΥΣΙΚΗΣ

Γενικό Σεμιναρίο Τμηματός Φυσικής

SPECIAL PHYSICS COLLOQUIUM

Monday, 17 March 2008 17:00-18:00

3rd Floor Seminar Room

"Cosmological Inflation: A Personal Perspective"

Prof. D. Kazanas GSFC, NASA

<u>Abstract</u>

We present a brief review of Cosmological Inflation from the personal perspective of the speaker who almost 30 years ago proposed a way of resolving the problem of Cosmological Horizon by employing certain notions and developments from the field of High Energy Physics. Along with a brief introduction of the Horizon and Flatness problems of standard cosmology, this lecture concentrates on personal reminiscing of the notions and ideas that prevailed and influenced the author's thinking at the time. The lecture then touches upon some more recent developments related to the subject including exact solutions to conformal gravity that provide a first principles emergence of a characteristic acceleration in the universe and concludes with some personal views concerning the direction that the cosmology field has taken in the past couple of decades and certain speculations some notions that may indicate future directions of research.