

ΣΕΜΙΝΑΡΙΟ ΚΕΝΤΡΟΥ ΚΒΑΝΤΙΚΗΣ ΠΟΛΥΠΛΟΚΟΤΗΤΑΣ &
ΝΑΝΟΤΕΧΝΟΛΟΓΙΑΣ/ CCQCN SEMINAR

Friday, 09 October 2015

11:00-12:00

3rd Floor Seminar Room

**Reconstruction of phenomenological inflationary models in the Einstein and
f(R) gravity**

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Abstract

Quantitative information about details of inflation obtained from recent CMB observational data on the primordial spectrum of scalar (density) perturbations suggests going further and reconstructing inflationary models phenomenologically using some additional assumptions, mainly aesthetic ones, about the form of the spectrum in the region of smaller scales. I remind an old result about the reconstruction of the inflaton potential in the Einstein gravity, obtained without expanding the power spectrum in a power series at some scale, and generalize it to the case of f(R) gravity. Predictions for the tensor-to-ratio following from the simplest and most elegant assumptions are summarized

