



Contribution ID: 46

Type: **not specified**

Minimal models of inflation – connecting cosmology and experiment

Monday, April 18, 2011 4:10 PM (20 minutes)

Current Standard Model of elementary particles nicely describes (nearly) all phenomena observed in the laboratories. On cosmological scales the situation is much worse – reliable experimental observations do not fit into the Standard Model. In the beginning the Universe had a period of inflationary expansion, now it is filled with Dark Matter and has baryon asymmetry. All these require explanation beyond the Standard Model. I will argue on the examples of the model with light inflaton and of Higgs inflation that extending the SM in a very minimal way leads to explanation of all these experimental facts, and connects Universe behaviour at the earliest (inflationary) stage to the possible effects in modern laboratories.

Primary author: Dr BEZRUKOV, Fedor (LMU)

Presenter: Dr BEZRUKOV, Fedor (LMU)

Session Classification: Contributed Talks