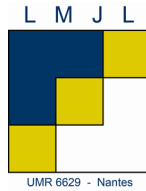




UNIVERSITÉ DE NANTES



*Laboratoire de mathématiques Jean Leray*

*Unité mixte de recherche 6629*

## **SÉMINAIRE DE PHYSIQUE MATHÉMATIQUE**

Jeudi 25 mars 2015  
Salle des séminaires à 16h00

**Sergey Ketov**

(Tokyo Metropolitan University, Japan and Kavli IPMU)

*Early universe inflation and PLANCK/BICEP2 data*

The early universe cosmology can be successfully described in the theoretical framework of modified gravity and quintessence. I introduce the Starobinsky and Linde inflationary models in light of the recent CMB observations by the PLANCK satellite mission and the BICEP2 telescope. Preheating and reheating after inflation are briefly reviewed. Some very recent theoretical results about inflation, leptogenesis, dark matter and dark energy in the context of  $N=1$  supergravity are outlined.