

Area Seminar

Title U(1)_{B-L} extra-natural inflation

Date and Time 21/03/2014 14:30:00

Speaker Dr. Kazuyuki Furuuchi

Manipal University

Area Theoretical Physics

Venue Room No. 469

Recently there has been an increasing support for the hypothesis that our universe once experienced an extraordinary expansion called cosmic inflation at very early time. If the inflaton, whose potential caused the inflation, does not couple to particles which can be probed by current or near future experiments, it will be challenging to uncover its microscopic identity. However inflationary models based on well-motivated particle physics theories can be constructed, with the hope that one such model was indeed realized and we can test inflation also from particle physics experiments. In this talk I will present one example of single-field slow-roll inflation model which is closely connected to particle physics beyond the Standard Model. I will also discuss general theoretical issues in inflation.