Area Seminar

Title	Vector perturbations in ELKO cosmology
Date and Time	16/10/2014 16:00:00
Speaker	Dr. Abhishek Basak IISER-Trivendrum
Area	Theoretical Physics
Venue	Room No. 469
Abstract	In this work we have analysed the first order vector perturbations in the context of inflationary model driven by non-standard spinor also known as ELKO. Unlike the standard scalar field driven inflation, the $\eta-i$ component of the first-order perturbed energy-momentum tensor of the ELKOS is non-zero indicating the plausibility of the generation of the pure vector part of the metric perturbation (B_{i}). The same component of the perturbed Einstein equation gives us the evolution equation of B_{i}. The evolution equation is solved under a condition on the background field which leads to super-inflation. Nearly time invariant and scale invariant solution for B_{i} in super-horizon scale has been achieved.