KMI Colloquium

Distant Sound before the Hot Big Bang – Challenge with Cosmic Microwave Background Measurements



Masashi Hazumi (KEK / Kavli IPMU) Wednesday, 26th Nov, 17:00-KMI Science Symposia (ES635)

Abstract:

The cosmic microwave background (CMB) has been playing a central role in revealing the astonishing secrets of our universe. The biggest attention is currently given to precision measurements of the CMB polarization. The cosmic inflation, which is the leading hypothesis today for the universe before the hot big bang, predicts that gravitational waves that were generated during the inflationary era imprinted a special pattern called the B-mode on the CMB polarization map. Detection of the B-mode signal would allow us to test inflationary models and quantum gravity theories behind

that, opening up the new path toward the experimental quest for the ultimate theory of

physics including the superstring theory. In this seminar the present and future of the

CMB polarization measurements are summarized.



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