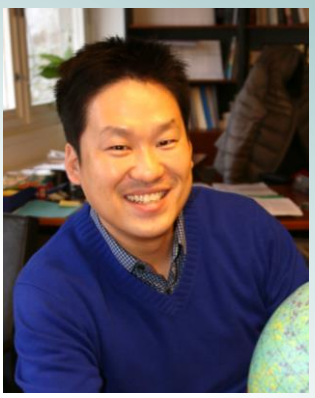
universität innsbruck

Innsbruck Physics Colloquium



Eiichiro Komatsu

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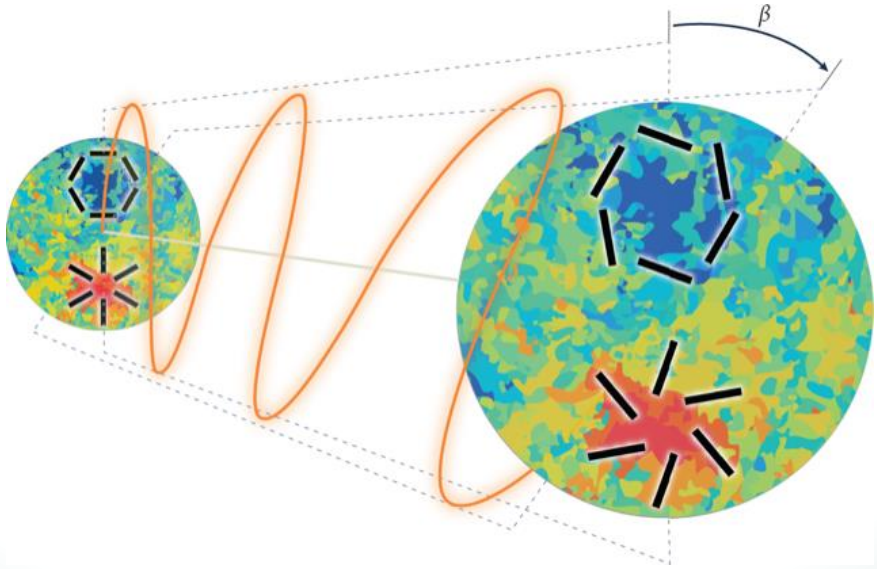
Finding Gravitational Waves from the Early Universe

The Cosmic Microwave Background (CMB) gives a photographic image of the Universe when it was still an “infant”, and its detailed measurements have given us a wealth of information, such as the composition and history of the Universe. The CMB research told us a remarkable story: the structure we see in our Universe, such as galaxies, stars, planets, and eventually ourselves, originated from tiny quantum fluctuations in the period of early Universe called “cosmic inflation”. But is this picture true? To answer this question, we are now trying to find a signature of the “primordial gravitational waves” generated from the earliest moment of the Universe in the polarised light of the CMB. In this lecture, I will review the physics of CMB and key results from recent experiments and discuss future prospects for the quest to find out about our origins.



Tuesday, 23.05.2023, at 16:30 h, HS C (Technik)

Innsbruck Physics Colloquium,
Organisation: K. Erath-Dulitz, H.-C. Nägerl, T. Schrabback