Neutrino Interferometry for High-Precision Tests of Lorentz Symmetry with IceCube

Teppei Katori (香取哲平), Queen Mary University of London

2017年12月25日 15:00 - 16:00 @ 総合研究棟 W202会議室



Lorentz symmetry is a fundamental space-time symmetry underlying the Standard Model of particle physics and gravity. However, unified theories, such as string theory, allow for violation of this symmetry. Here, we use high-energy atmospheric neutrinos observed at the IceCube Neutrino Observatory to search for Lorentz violation. These are among the most stringent tests on Lorentz violation across all fields of physics.