KMI-Colloquium

Primordial black holes in the era of gravitational wave astronomy



Teruaki Suyama (Tokyo Institute of Technology)

Wednesday, 27 June, 17:00-KMI Science Symposia (ES635)

Abstract:

Black holes might have formed in the very early universe before the big bang nucleosynthesis. Those black holes, known as primordial black holes(PBHs), behave as dark matter, and there are a lot of studies about whether PBHs can explain all dark matter or not. The recent discovery of binary black holes by LIGO has led to a resurgence of the PBH hypothesis. In this talk, I will present my recent study which showed a possibility that LIGO black holes are PBHs. I will also discuss about how to test the PBH hypothesis by future gravitational wave observations.