Contribution ID: 29 Type: Oral presentation

## Estimation of background distribution in gravitational wave search

Friday, 15 February 2019 11:30 (30 minutes)

To evaluate the significance of the event, we need to estimate the background distribution of the detection statistic

The data analysis in LSC collaboration apply the time shift method for the data of two detectors to estimate the significance.

In this talk, we present about the new method to estimate the background distribution and the significance in the compact binary coalescence search.

Primary author: YUZURIHARA, Hirotaka (Institute for Cosmic Ray Research, The University of Tokyo)

**Co-authors:** Prof. TAGOSHI, Hideyuki (Institute for Cosmic Ray Research, The University of Tokyo); Dr MANO, Shuhei (The Institute of Statistical Mathematics)

Presenter: YUZURIHARA, Hirotaka (Institute for Cosmic Ray Research, The University of Tokyo)

Session Classification: Data Analysis and Computing