第18回
RESCEU コロキウム

東京大学大学院理学系研究科 附属ビッグバン宇宙国際研究センター

日　時:　2017 年 11 月 20 日(月) 16:30 ～18:30

場　所:　化学本館 5F 講堂

講　師:　Kipp Cannon 氏 (RESCEU), Masaomi Tanaka 氏 (NAOJ)

Kipp Cannon 氏:

GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral

On August 17, 2017 at 12:41:04 UTC the Advanced LIGO and Advanced Virgo gravitational-wave detectors made the first observation of a compact object collision consistent the the inspiral and merger of a pair of neutron stars. 1.7 s later GRB 170817A was detected by Fermi-GBM, and 10.5 h later supernova SSS17a was identified the 1M2H team using the 1 m Swope Telescope, both in the same part of the sky from which the GWs originated. Many hundreds of observations of the event have followed, marking the dawn of the era of joint gravitational and electromagnetic astronomy. I will present a summary of the gravitational wave discovery and what we have learned from the signal.

Masaomi Tanaka 氏:

Electromagnetic Wave Observations of GW170817

The first gravitational wave (GW) observation from a neutron star merger was successfully made for GW170817. The detection triggered electromagnetic (EM) wave observations over the entire wavelength range, which enebled the first identification of an EM counterpart of a GW source. I review EM observations of GW170817 and discuss implications from observations and open questions.

興味をお持ちの方の聴講を歓迎致します。お茶とお菓子を用意しております。