

第2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: 2015年4月22日(水) 14:00 ~ 15:30

場 所: 理学部4号館1階ピロティ RESCEU セミナー室

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Challenges in Gravitational-Wave Astronomy

Gravitational radiation promises new knowledge about our world, but all attempts to observe gravitational waves (GWs) have been unsuccessful. There are many challenges to overcome in our quest to detect this elusive form of energy. I will describe how multivariate classifier techniques have been used to combat detector noise in searches for GWs from cosmic strings with LIGO and Virgo, and how the search for binary neutron star collisions has created new techniques for modeling collision waveforms.

Rapid detection of GWs will allow GW antennas like KAGRA to join a larger transient astronomy community and will provide exciting, new, information about the Universe. I will describe the analysis techniques used to achieve the extreme performance required to search for GWs from neutron star collisions with tens of seconds of latency. Finally, I will comment on some challenges that lay ahead for our community, and what might be done to address them.

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。