## 第 56 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: 2022年6月2日(木) 16:00~17:00

場 所: 理学部4号館1階セミナー室・Zoom (ハイブリッド)

講 師: Stefan Ballmer 氏 (Syracuse University)

## The Next Leap in Gravitational-Wave Astronomy

## **Abstract**

The Gravitational-Wave Transient Catalog from the Advanced LIGO and Advanced Virgo observation run for the first time provides a non-trivial sample of actual gravitational-wave sources. Thus for the first time we can design the next-generation detectors with good guidance on the observable signals. This talk will discuss the latest results, and then focus on the detector technology currently used in Advanced LIGO, its sensitivity limitations and the plans for the next-generation detectors Cosmic Explorer and Einstein Telescope. In particular, it will highlight the technology developments needed for those detectors.

興味をお持ちの方の聴講を歓迎致します。