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# 国台学术报告 NAOC COLLOQUIUM

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**Time: Wednesday 2:30 PM, Jun. 3rd**    **Location: A601 NAOC**

## Observing Gravitational Waves with Advanced Detectors

**Dr. Ik Siong Heng (University of Glasgow)**

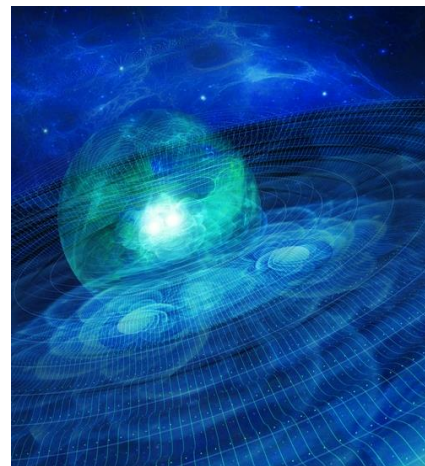


Dr. Ik Siong Heng began his research career working on resonant-mass gravitational wave detectors at the University of Western Australia. As part of his PhD, he performed the first search for burst gravitational waves using a global network of five gravitational wave detectors. After graduation in 2000, he moved to Louisiana State University as a postdoctoral researcher and was involved in the first search for stochastic gravitational waves using both resonant-mass and interferometric gravitational wave detectors. In 2002, he took up a postdoctoral position at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute) and led the first LIGO-GEO burst gravitational wave search as co-chair of the GEO burst team. He moved to the University of Glasgow in 2005 where he is now a Reader in the School of

Physics and Astronomy. Dr Ik Siong Heng leads the Glasgow team on Burst gravitational waves and multimessenger astronomy. He is also currently co-chair of the Burst analysis group for the LIGO Scientific Collaboration and oversees transient analyses performed by the global gravitational wave community.

### Abstract

In order to perform gravitational wave astronomy, one must decipher the astrophysical information encoded in the detected gravitational wave signals. This talk will begin with an overview of Advanced LIGO and Advanced Virgo before presenting the prospects for gravitational wave astronomy in Advanced detector era. Then, a brief overview of the methods for performing gravitational wave astronomy, based on Bayesian inference, will be presented, followed by highlights of some examples of gravitational wave astronomy for "unmodelled" Burst gravitational wave signals and other transients signals.



*All are welcome! Tea, coffee, biscuits will be served at 2:15 PM.*