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## High-frequency gravitational-wave astronomy

Saturday, 1 June 2019 11:00 (30 minutes)

In this talk I will discuss some recent development towards detecting gravitational waves in the kilo Hertz band. On the detector side, we propose a new interferometer design that significantly improves detector sensitivity above 1 kHz. On the science front, we identify several key questions that can be answered by combining high-frequency gravitational-wave detection and electromagnetic observation, including binary neutron star post-merger process, tests of modified gravity theories and understanding star disruption in black hole/neutron star mergers.

Primary authors: Dr MARTYNOV, Denis (University of Birmingham); Dr YANG, Huan (Uniersity of Guelph)

**Co-author:** Dr MIAO, Haixing (University of Birmingham)

Presenter: Dr YANG, Huan (Uniersity of Guelph)

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