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The 7th IOPP Seminar : Prof. Lijing Shao (邵立晶) , Peking University (北京大学), June 10th, 2020, Wednesday, 10:00am (Beijing time)

Title: Fundamental Physics with Gravitational Waves

Speaker: Lijing Shao (Kavli Institute for Astronomy and Astrophysics, Peking University)

Abstract
In this talk, I will (a) introduce the gravitational-wave events that were observed by the LIGO/Virgo detectors, (b) explore the relevance of these events to our understanding of fundamental physics, in particular for gravitation and cosmology, and (c) discuss the near-future detections that are expected with the ongoing observing runs and upcoming new instruments.

Dr. Lijing Shao obtained his PhD degree on Theoretical Physics from Peking University in 2015. Then he worked as a Junior Scientist for two years in the Max Planck Institute for Gravitational Physics (a.k.a. the Albert Einstein Institute), and as a Scientific Staff for one year in the Max Planck Institute for Radio Astronomy. In 2018, he joined the Kavli Institute for Astronomy and Astrophysics at Peking University as a Researcher. Dr. Shao's main research interests include tests of gravity theories, pulsars and neutron stars, gravitational waves, and new physics beyond the standard model of particle physics. He developed gravitational waveform that is used by LIGO/Virgo to discover binary black hole mergers, and he was awarded the 2020 Breakthrough Prize in Fundamental Physics (shared by 347 EHTC members) for the first image of the supermassive black hole in M87.