

Title: Low-Latency Gravitational Wave Detection and Multi-messenger Astronomy

Presenter: Linqing Wen (UWA)

Abstract:

It is an exciting time for gravitational wave (GW) multi-messenger astronomy. I will present the effort from the gravitational wave astronomy group at the University of Western Australia in terms of the development of the low-latency GW online detection pipeline SPIIR. In particular, I will discuss the pipeline's design, the GPU acceleration used, its performance on simulated and real data, and implication to prompt follow up observations from conventional telescopes.