

# Chasing Fireworks from Black Holes

Black holes are probably the least understood yet the most fascinating celestial objects in our Universe. In this talk, Dr Jane Dai will talk about the “fireworks” produced by black holes which light up their surrounding space-time.

Date: October 29, 2019 (Tue)

Time: 5:30 pm — 6:30 pm (light refreshments from 5 pm)

Venue: Theatre CBA, Chow Yei Ching Building, Main Campus, HKU

Speaker: Dr Jane Lixin DAI

Assistant Professor, Department of Physics, HKU

## About the talk

Black holes are probably the least understood yet the most fascinating celestial objects in our Universe. Although black holes are usually dark and invisible, occasionally they can produce “fireworks” which light up their surrounding space-time. Scientists have put tremendous efforts into catching such fireworks for decades, and recently a few sophisticated observations greatly improved our understanding of black holes. The Event Horizon Telescope has just captured the first-ever image of a massive black hole and its shadow. The Swift telescope has allowed us to witness a star wandering too close to a black hole and getting pulled apart. LIGO has detected the gravitational waves, or the ripples of space-time, produced by two black holes spiraling towards each other and eventually colliding into one.

In this talk, the speaker will discuss the black hole science that has been learnt from these successful endeavors and that will be explored with new telescopes to be launched soon.

## About the speaker

Dr Jane Lixin Dai is a theoretical astrophysicist who studies stars, accretion disks, and jets around black holes. She received her BSc from HKUST and PhD from Stanford University. She joined HKU this year as an Assistant Professor.

