

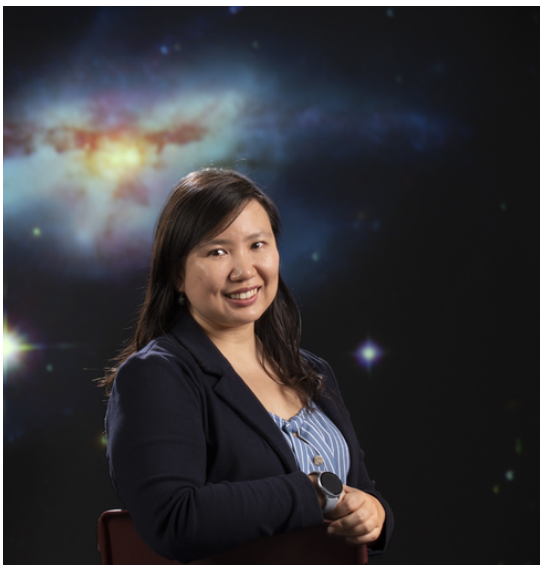
PHYSICS AND ASTRONOMY COLLOQUIUM

Black Hole Feedback in Galaxy Mergers

Friday, January 24 | 3:30-4:45 p.m. | Planetary Hall 120

Join Vivian U for a captivating talk on galaxy mergers. Galaxies, termed “Cosmic Ecosystems”, consist of stars, gas, and black holes – the interaction among which dictates how a galaxy grows over time as a dynamic entity.

In this talk, she will showcase new JWST and Keck integral-field spectroscopic observations of merging galaxies that trace the movement of the multiphase gas as it traverses the galactic ecosystems, enabling a detailed understanding of this dynamic feedback process. Our early results reveal galactic-scale shocks from starburst-driven superwinds, AGN outflows driven by precessing radio jets, and decelerating winds with signatures of ionization stratification. The power of resolved studies in dissecting how systems dynamically evolve has become indispensable for understanding multiphase gas feedback from nuclear to galactic scales.



VIVIAN U

Vivian U is a Research Scientist at the University of California Irvine. She is an observational astronomer who is a leader in the field of interacting galaxies using state-of-the-art ground- and space-facilities including Keck and the James Webb Space Telescope.



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