

## "From Black Hole to Afterglow" Ryan Caywood

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Jets, launched by compact objects, collide with the interstellar medium and emit across the electromagnetic spectrum. We refer to this emission as the "afterglow". We will use the HARMPI code to simulate a jet and will extract several jet properties, including jet energy and speed as a function of angle from the jet axis. We will write a C++ code to calculate the afterglow as a function of arbitrary observer angle. The jet properties from HARMPI will be used as an input for the afterglow calculation in our C++ code and will allow us to predict several observable features.

> \*Tuesday, May 7, 2024 4:00 - 5:20PM MND1015 Open & Free to all students, faculty and public