

## Dark Matter as General Thermal Relics

*Monday 14 November 2022 12:30 (30 minutes)*

I will discuss dark matter candidates that are thermal relics of the early universe. In the first part of the talk, I will present a roadmap for exploring various theories including the WIMP, dark sectors and more, using the observed relic density as guidance. In the second part, I will focus on a class of thermal relics that decouple relativistically early on and require a dilution mechanism for obtaining the correct relic density. A novel cosmological observable for probing such warm dark matter candidates will be discussed.

**Presenter:** ZHANG, Yue (Carleton University)

**Session Classification:** Session I