

Munich/Garching Dark Matter meeting

Feb, 24th - 11am

Title:

B-Mesogenesis: Baryogenesis and Dark Matter from B Mesons

Abstract:

In this talk, based on [1810.00880](#) and [2101.02706](#), I will present a new mechanism of Baryogenesis and Dark Matter production: B-Mesogenesis. Within the B-Mesogenesis paradigm, both the dark matter relic abundance and the baryon asymmetry arise from neutral B meson oscillations and subsequent decays in the early Universe. If this mechanism is at play in the early Universe it would lead to unique collider signatures that I will describe in detail. I will also discuss various possibilities for the dark sector. Finally, I will show that a combination of measurements at BaBar, Belle, Belle II, LHCb, ATLAS & CMS can fully test B-Mesogenesis.

Connection details:

<https://zoom.us/j/95071113164?pwd=NHg4dVh2UXZEEa0pMeTJhWXAxU3lyUT09>

Meeting ID: 950 7111 3164

Passcode: 829582