DESY

Particle and Astroparticle Physics Colloquium



MeV to GeV Dark Matter: When WIMPs Are Too Heavy and Axions Too Light.

Tuesday, 04 March, 2025 Auditorium & Webcast 16:00 h

ZOOM ID: 996 1652 8733 Meeting Password: 733220

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Astronomical and cosmological observations reveal a persistent discrepancy between the apparent distribution of mass and predictions based on gravity, pointing to the presence of dark matter. In this talk, I will review dark sector candidates in the MeV to GeV mass range. These candidates have driven theoretical innovation and experimental progress while offering astrophysical and cosmological implications that complement those of electroweak-scale dark matter and ultralight candidates such as axions. I will present the general picture, discuss recent developments and outstanding challenges—from theoretical constraints to experimental detection strategies—and highlight ongoing efforts aimed at further illuminating the dark sector.





