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## Constraining asymmetric dark matter with asteroseismology

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Low-mass asymmetric dark matter (DM) particles are appealing DM candidates that are not detectable with most indirect DM searches. However, these particles may efficiently accumulate in the core of low-mass stars, reducing their central temperatures and inhibiting the formation of small convective cores in  $1.1\text{-}1.3 M_{\odot}$  stars, thus leaving a characteristic signature in the low-degree modes of the stellar oscillations. Here I will present the first asteroseismic constraints to the properties of these DM particles, obtained comparing the oscillations of Alpha Cen B with modified stellar models. To conclude, I will discuss the prospects of using this approach with targets of the Kepler mission such as red giants and stars with detected convective cores.

**Primary author:** Dr CASANELLAS, Jordi (Max Planck Institute for Gravitational Physics (Albert Einstein Institute))

**Presenter:** Dr CASANELLAS, Jordi (Max Planck Institute for Gravitational Physics (Albert Einstein Institute))

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