



Contribution ID: 47

Type: **Invited Talk**

## Dark branes for PTA data and dark matter

*Friday 26 April 2024 11:30 (30 minutes)*

In the setup of a warped extra dimension we have proposed a far IR brane, at the GeV scale, with a conformal sector confining at a first order phase transition, and generating a stochastic gravitational waves background which can accommodate the recent NANOGrav signal. If dark matter is localized in the dark brane, it has only gravitational interactions with the Standard Model: it can easily reproduce the thermal relic density by annihilations into radions, and avoid direct detection experiments. A region in the parameter space of dark matter and radion masses is selected.

**Presenter:** QUIROS CARCELEN, Mariano (The Barcelona Institute of Science and Technology (BIST) (ES))

**Session Classification:** Morning