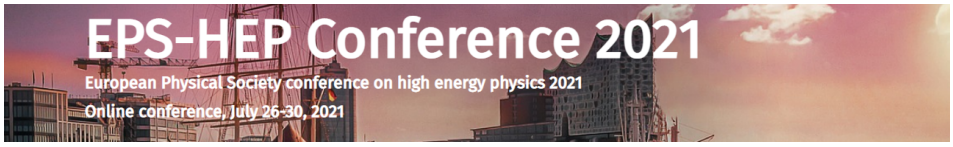

Contribution ID: **495** Type: **Parallel session talk**

The IDM and THDMa - current constraints and future prospects

Friday 30 July 2021 10:15 (15 minutes)

The THDMa is a new physics model that extends the scalar sector of the Standard Model by an additional doublet as well as a pseudoscalar singlet and allows for mixing between all possible scalar states. In the gauge eigenbasis, the additional pseudoscalar serves as a portal to the dark sector, with a priori any dark matter spin states. The Inert Doublet model is another intriguing new physics model containing a dark matter candidate, which so far has not been investigated by the LHC experiments. I discuss current bounds as well as discovery prospects for both models at current and future colliders.

First author

Tania Robens

Email

trobens@irb.hr

Collaboration / Activity

Phenomenological study

Primary author: ROBENS, Tania (Rudjer Boskovic Institute (HR))

Presenter: ROBENS, Tania (Rudjer Boskovic Institute (HR))

Session Classification: T10: Searches for New Physics

Track Classification: Searches for New Physics