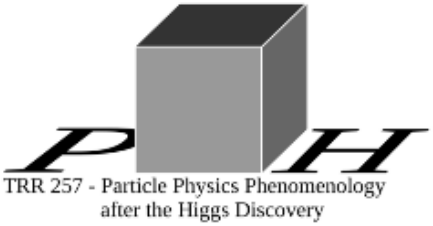

Contribution ID: **18** Type: **talk**

Tasting Flavoured Majorana Dark Matter

Thursday, June 9, 2022 11:30 AM (30 minutes)

I will discuss a flavoured dark matter (DM) model set up in the so called Dark Minimal Flavour Violation (DMFV) framework. The model extends the Standard Model by a DM flavour triplet and a scalar mediator, through which the new dark fermions couple to right-handed up-type quarks. This interaction is governed by a new coupling matrix which is assumed to constitute the only new source of flavour and CP violation. After briefly presenting the details of this simplified model and the DMFV framework in the first part, I will continue and discuss its phenomenology in the context of collider, flavour, cosmology and direct detection constraints. I will further ‚taste'the flavour of the DM field by discussing which DM flavour is preferred after a combined analysis of all experimental constraints mentioned above. In the last part, I will present an estimation of the direct CP asymmetry in charm decays in this model and conclude my talk by discussing if it is capable of explaining the large measured value of this asymmetry.

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