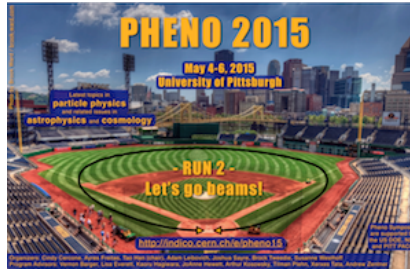


Phenomenology 2015 Symposium



Contribution ID: 68

Type: **parallel talk**

Aspects of Lepton Flavored Dark Matter

Tuesday, 5 May 2015 15:00 (15 minutes)

All matter in the Standard Model appears in three generations, with a flavor structure the origin of which is not well understood. This motivates the question whether distinct phenomenological features arise if dark matter (DM) also has a non-trivial flavor structure. In this talk I will review the experimental signatures of a scenario where DM carries lepton flavor. I will demonstrate that the generation of a lepton asymmetry at a high energy scale can also produce a DM asymmetry, which can strongly affect the sensitivity of direct detection experiments, and I will present novel signatures that can appear at colliders and in indirect detection experiments.

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Session Classification: Dark Matter III