



Contribution ID: 1263

Type: **Invited Speaker / Conférencier invité**

## **The Conformal Standard Model, Higgs Portal Extensions, and Dark Matter**

*Wednesday 15 June 2016 15:15 (30 minutes)*

One of the possible custodial symmetries responsible for naturalness in the Standard Model is conformal (scale invariance) symmetry of the Lagrangian. After a brief review of the Higgs mechanism in the classically-conformal Standard Model, Higgs-portal singlet extensions as a model for dark matter are introduced. Results for the dark matter mass and cosmological abundance predictions in these Higgs-portal models will be presented.

**Author:** STEELE, Tom (U of Saskatchewan)

**Presenter:** STEELE, Tom (U of Saskatchewan)

**Session Classification:** W3-5 Cosmology and Astrophysics (DTP-DIMP-PPD) / Cosmologie et astrophysique (DPT-DPIM-PPD)

**Track Classification:** Theoretical Physics / Physique théorique (DTP-DPT)