Contribution ID: **55** Type: **Oral presentation**

Electroweak physics and Dark Matter: colliders vs sky

Monday, 26 October 2015 17:39 (17 minutes)

Probing the thermal WIMP paradigm for Dark Matter is one of the primary goals of the high energy physics community. To study the interplay of the LHC with direct and indirect detection experiments, it is necessary to study benchmark WIMP models. I will do so by adding to the Standard Model an electroweak multiplet, which is arguably the simplest way to realise such a study. Besides that, these DM candidates are also motivated by Supersymmetry, Minimal Dark Matter, and strongly-coupled constructions. I will overview
the interplay of several different constraints, commenting also on the impact of electroweak corrections, in particular at a futuristic 100 TeV pp collider.

Primary author: Dr SALA, Filippo (IPhT, CEA/Saclay)

Presenter: Dr SALA, Filippo (IPhT, CEA/Saclay)

Session Classification: Dark Matter

Track Classification: Dark matter searches (direct and indirect)