

## Accelerator Dark Matter Searches

*Tuesday, 25 July 2017 10:40 (30 minutes)*

Searches for dark matter (DM) have become a major focus of the LHC physics programmes. Run-2 DM results from the ATLAS and CMS experiments showcase the ability of collider searches to compliment the sensitivity of direct and indirect detection experiments. In this talk, we review the strategy and status of DM searches in ATLAS and CMS, and show how recent results strongly constrain models of WIMP DM. We explore the unique sensitivity of several DM search channels and highlight LHC constraints on low mass DM and spin-independent DM couplings. We consider the likely evolution of the ATLAS and CMS search programmes in Run-2 and conclude with a discussion of new ideas for extending the reach of future DM searches at the LHC.

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