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LHC experiments for long-lived particles of the dark sector

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Dark matter scenarios are being tested at the LHC in the general-purpose experiments through *promptly* decaying states. In parallel, new dedicated detectors have been proposed for the LHC to probe dark matter portal theories predicting *long-lived* particles that decay away from the interaction point: MoEDAL-MAPP, MoEDAL-MALL, FASER, CODEX-b, MATHUSLA, AL3X, ANUBIS, milliQan. In addition, the SHiP beam-dump experiment is planned to operate with the SPS beam to extend the discovery reach for such particles. The detector design and expected physics sensitivity of these experiments will be presented with emphasis on scenarios explaining the nature of dark matter.

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