

Physics Beyond Colliders at CERN

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It is an interesting time for particle physics. There is strong evidence for Dark Matter, and little sign of deviations from the Standard Model at the LHC. This is fermenting a growing interest in precision studies and searches for novel forces at wide range of energies and couplings. In 2016 CERN established a Physics Beyond Collider initiative, an exploratory study aimed at exploiting the full scientific potential of CERN's accelerator complex and its scientific infrastructure through projects complementary to the LHC, HL-LHC and other possible future colliders.

Following an brief recap of the motivations, an overview of the options being explored is presented. These range from a beam dump facility, an all-electrostatic ring to measure the electric dipole moment of the proton, to solar axion searches. Particular attention is given to the fixed target options which primarily aim to harness the potential of the SPS.

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