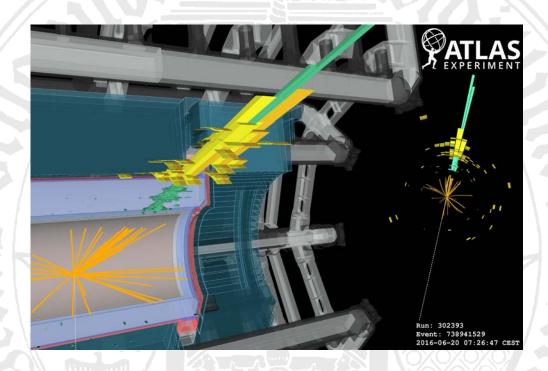


PHYSIKALISCHES KOLLOQUIUM

ANTRITTSVORLESUNG

AM 25. JUNI 2018 UM 17 UHR C.T.
IM GROßEN HÖRSAAL



SEARCHES FOR DARK MATTER AT THE LARGE HADRON COLLIDER

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There is a lot of evidence that we live in a Universe which is dominated by Dark Matter. This evidence is based on astrophysical observations, and to date there is no understanding what this Dark Matter might be. One exciting possibility is that there is a fundamental particle that constitutes the Dark Matter, and which was created abundantly in the early Universe. At the Large Hadron Collider very high energy collisions of protons recreate energies as they existed in the first fraction of a second after the Big Bang, and it is therefore in principle able to produce Dark Matter particles. Therefore a large focus of the research programme is the search for such Dark Matter particles, and I will discuss the current results from this programme and the future prospects.