Joint DESY and University of Hamburg Accelerator Physics Seminar

Tuesday, 17.05.2011

(15:00 in Room 459/30b)

Dust Particles in the LHC

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Abstract

After the startup of the Large Hadron Collider, so called UFOs ("Unidentified Falling Objects") turned out to be one of the major unexpected performance limitations. UFOs were first observed in July 2010 and caused numerous emergency beam dumps since then. They are presumably micrometer sized dust particles that lead to fast beam losses with a duration of about 10 turns when they interact with the beam.

In 2011, an improved detection and diagnostic of UFO events allows estimations of the properties, dynamics and possible production mechanisms of the dust particles. The state of knowledge and mitigation strategies are presented.

NOTE THE UNUSUAL TIME

J.Roßbach (Univ. HH) and M.Vogt (MFL).

Visit our web site at `http://www-mpy.desy.de/AccPhySemDESY/index.html`

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