

CU Physics Department Particle Seminar

Wednesday, November 17, 2010 705 Pupin Hall 1:00 PM

The Tevatron's Massive Search for the Higgs

The standard model (SM) of particle physics requires some mechanism to explain the existence of fundamental particles with non-zero mass. The simplest way to add massive particles to the SM also introduces a new particle, the Higgs boson, which has never been observed. I will discuss the current status of the search for the SM Higgs boson at the Fermilab Tevatron Collider and describe the tools we use to attempt to find, or exclude, its small signal against a large background. I will also discuss the future prospects of the SM Higgs search at the Tevatron.

Michael Cooke, Fermilab

