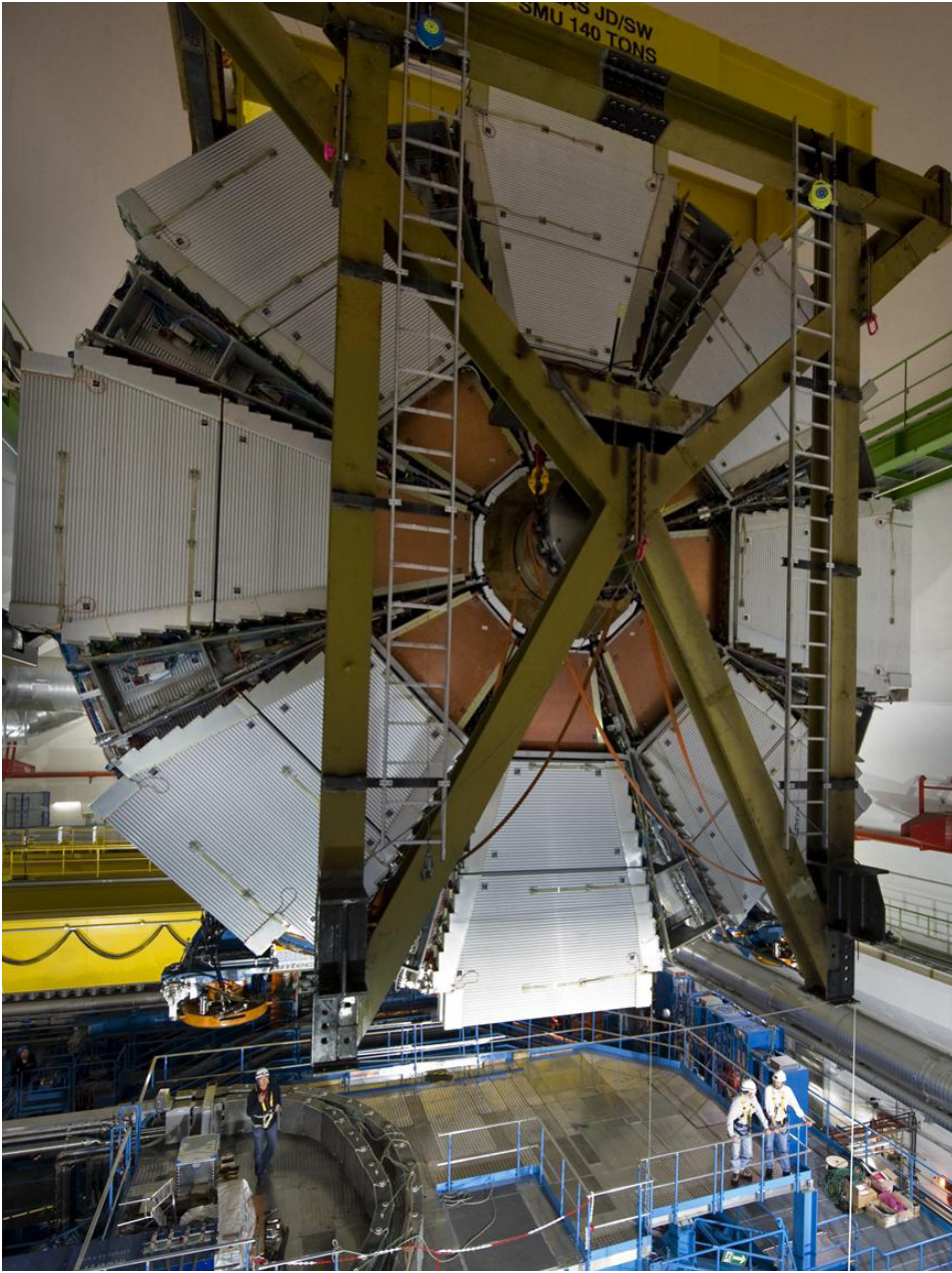
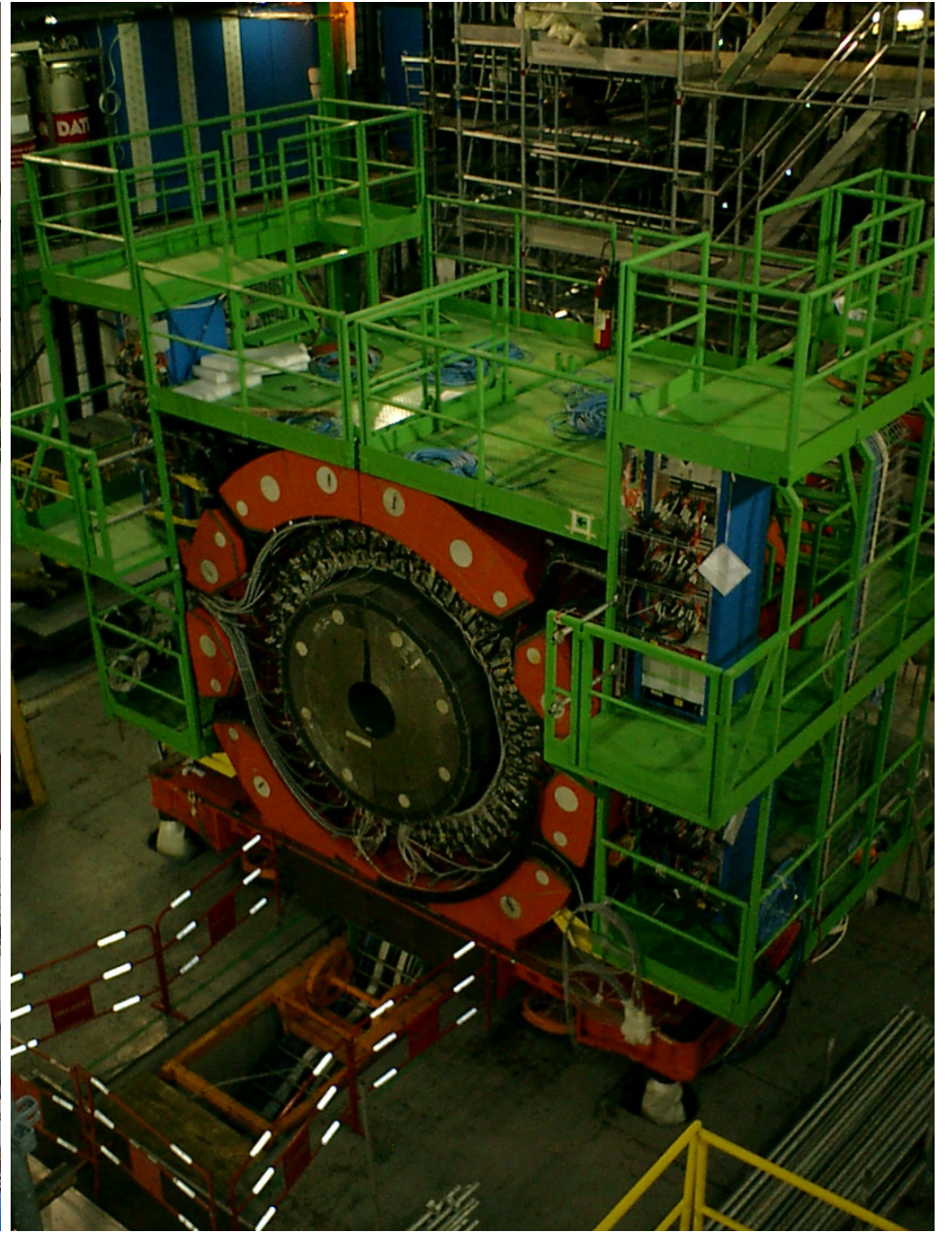


Boston University Physics Colloquium



ATLAS: Installation of 9 m diameter Small Wheel, part of the Muon Tracker (with a total area of 3 football fields); many precision chambers of these wheels were built by BU, as well as its data acquisition electronics.



CMS: One of two (forward and backward) quartz-fiber Cherenkov calorimeters, initiated and prototyped at BU; much of the electronics for it and the rest of the Hadronic Calorimeter were built at BU.

The Future of Physics: challenges and opportunities at the Large Hadron Collider

A corner stone of the Standard Model of particle physics has escaped experimental verification: the “Higgs” process that generates mass. In the absence of the Higgs, many theoretical extensions have been proposed, such as supersymmetry, technicolor, and extra dimensions of space. At the LHC, starting this summer, these hypotheses will be confronted by experiment; indeed they all may be insufficient to describe reality, opening the door to more discoveries.

The LHC will be described, showing its size and complexity. I will emphasize the three pillars of the project - the accelerator, the detectors and grid-computing - as well its most salient feature: the cooperation between the worldwide particle physics community to achieve what will become the best human paradigm for future international collaboration in science.

Robert Aymar
Director General, CERN

April 17, 2008 (Thursday) at 3:30pm (Refreshments at 3:00pm)

SCI 107, Metcalf Science Center, Boston University

Call: Winna Somers (wsomers@bu.edu) (617) 353-9320

Host: Lawrence Sulak