IIT Bombay is organising an Institute Colloquium on Monday, August 29, 2011. The details are as follows:

Speaker **Dr. Michael E. Peskin**
Professor, Particle Physics and Astrophysics
SLAC National Accelerator Laboratory
Stanford University
USA

Title	:	**The Search for New Elementary Particles at the CERN Large Hadron Collider**
Day & Date	:	Monday, August 29, 2011
Time	:	5.15 p.m.
Venue	:	Main Auditorium, Victor Menezes Convention Centre

All are invited.

Abstract: The Large Hadron Collider at CERN in Geneva, Switzerland, has just begun its operation. This accelerator and its experiments are enormous in many respects---in the physical size of the facilites, in the sizes of the experimental teams, but also in the stakes for the study of physics at the smallest distance scales. In this colloquium, I will describe the physics questions that motivate the LHC experiments, the detectors that are designed to meet these goals, and the challenges that the experiments must overcome. I will show some of the first results from the LHC. I will describe the methods that will be used at the LHC in the coming year to search for completely new types of elementary particles and forces.

About the Speaker: Dr. Peskin is an outstanding theorist and a theoretical consultant to the world famous Stanford Linear Accelerator Center at Stanford University. He has done pioneering work in various areas of high energy particle physics, from superstring theory to accelerator signature of new physics. He has developed several conceptual tools to analyze the data.

Dr. Peskin graduated in 1977 and received his doctorate in physics from Cornell University in 1978. He was a postdoctoral fellow at Harvard, Centre d'Etudes Nucléaires, Saclay, and at Cornell. He joined the faculty of the Stanford Linear Accelerator Center in 1982. Dr. Peskin's research concerns models of new physics at the energy scale of weak interactions—technicolor, supersymmetry, extra dimensions, and all the rest—and methods for studying these models at high-energy particle colliders. He is also a co-author of a widely used textbook on Quantum Field Theory. He is a fellow of the American Physical Society, American Association for the Advancement of Science and American Academy of Arts and Sciences.