Colloquium # 241

Institute for Plasma Research

Title :	Hundred years of Fundamental Physics and a
	Crisis
Speaker : Dr. G. Rajasekaran	
	Institute of Mathematical Sciences,
	C I T Campus, Chennai, India
Date :	24th November 2014 (Monday)
Time :	03.30 PM
Venue :	Seminar Hall, IPR

Abstract:

One hundred years of Fundamental Physics have culminated in a theory called Standard Model of High Energy Physics. This theory is now known to be the basis of almost ALL OF KNOWN PHYSICS except gravity. The discovery of the Higgs Boson in 2012 has established this theory. An elementary account of this theory will be given in the talk. However gravitational force has been left out in this theory. The energy scale of quantum gravity is 16 orders of magnitude higher than the presently accessible TeV energies. This is a Crisis in Fundamental Physics that can be met only by the discovery of new principles of acceleration. The talk will highlight this theme.