Abstract
A theory with such a mathematical beauty cannot be wrong: this was one of the main arguments in favor of string theory, which unifies all known physical theories of fundamental interactions in a single coherent description of the universe. But no one has ever observed strings, not even indirectly, neither the space of extra dimensions where they live. However, there are good reasons to believe that the "hidden" dimensions of string theory may be much larger than what we thought in the past and they become within experimental reach in the near future, together with the strings themselves. In my talk, I will give an elementary introduction of this framework and describe the main experimental predictions.

About the Speaker
Prof Ignatios Antoniadis is a CERN permanent staff member and also a CNRS Research Director at the Centre de physique théorique of the Ecole polytechnique. His research has covered a vast area of theoretical physics of elementary particles. Prof Antoniadis won the CNRS Silver Medal for 2000 for his work on the theory of supercords and phenomenological applications.