Sommerfeld Theory Colloquium

Prof. Marc Henneaux

Université Libre de Bruxelles

Infinite-dimensional symmetries: the key to understanding gravity?

It is well known that the description of the non-gravitational interactions (electromagnetism, weak and strong nuclear forces) relies on finite-dimensional Lie groups and algebras (e.g., SU(3)X SU(2)X U(1)). Recently, it has been argues by many groups that the description of the gravitational inter-action should involve infinite-dimensional Lie algebras of hyperbolic Kac-Moody type, such as E(10). The talk will provide a brief, pedagogical introduction to these mathematical structures and present some of the evidence for their relevance to gravity.

Wednesday, 29th October 08, 10:45 h, Room 348 / 349, Theresienstr. 37 / III

Prof. V. Mukhanov