

#### **OPEN TALK ANNOUNCEMENT**

19.08.15

4:00 p.m.

**Fermion** 

### Speaker:

#### **Professor Ramesh Anishetty**

(VASP Short Term Visitor to Prof. Manu Mathur, Department of Theoretical Sciences)

## Affiliation:

The Institute of Mathematical Sciences, Chennai

# Title:

A Theory of Quantum Gravity

# Abstract:

Fourth order derivative Quantum Gravity in 3+1 dimensions is shown to be perturbatively renormalizable and unitary with Newton's constant vanishing at short distance. Quantum Gravity coupled to gauge theories is shown to have a universal leading short distance behaviour which potentially can destroy asymptotic freedom. We show that to all loop orders this mishap is avoided. Few remarks for the future will be discussed.