



Department of  
Theoretical Physics

# ***THE QUANTUM SPACETIME SEMINAR***

***The Tata - Infosys Lecture Series***

**On the Possibility of a Closed String  
Field Theory with Cubic Action**

***Roji Pius***

(Perimeter Institute)

**Date:** Jan 22, 24 2018

**Time:** 11:30 am

**Date:** Jan 23, 2018

**Time:** 11:00 am

**Venue:** A-304, TIFR



String field theory is the quantum field theory that describes the dynamics of interacting strings. Unlike the string field theory describing the dynamics of only open strings, the practical utility of closed string field theory, the field theory describing the dynamics of closed strings, is very limited. Moreover, the action for closed string field theory is not polynomial. In this talk, I shall describe a new construction of closed string field theory that is well suited for doing computations. Interestingly, we will see that this new construction hints towards the possibility of a cubic closed string field theory.

***Tata-Infosys***