



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

**Current status on polynomial invariants
of knots- attempt towards classification**

P. Ramadevi

(IIT, Bombay)

Date: Oct. 30, 2017

Time: 11.30 am

Venue: A-304, TIFR



I will describe the methodology of obtaining knot invariants from Chern-Simons field theory after reviewing well-known knot polynomials. One of the challenging open problem is the classification of knots. To check the power of Chern-Simons field theoretic invariants, we investigate mutant knot pairs which are indistinguishable by well-known polynomials. Finally, I will review the developments providing justification for integer coefficients of the Laurent form of knot polynomials.