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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

## **ICTS String Theory Seminar**

Title : Eigenvalue equation for the modular graph  $C(a,b,c,d)$

Speaker : Anirban Basu, Harish-Chandra Research Institute, Allahabad.

Date : Thursday, December 12, 2019

Time : 4:00 PM

Venue : Emmy Noether Seminar Room

Abstract : The modular graph  $C(a,b,c,d)$  on the torus is a three loop planar graph in which two of the vertices have coordination number four, while the others have coordination number two. We obtain an eigenvalue equation satisfied by  $C(a,b,c,d)$  for generic values of  $a,b,c$  and  $d$ . This family of graphs arises in the calculation of one loop amplitudes in superstring theory.