ICTS Seminar

Title : Rigidity of logarithmic (infinite) Vertex Operator Algebra extensions

Speaker : Harshit Yadav (University of Alberta, Canada)

Date : Friday, 23 January 2026

Time : 11:30 AM (IST)

Abstract : This talk explains an algebraic approach to rigidity and modularity for vertex operator algebra (VOA) extensions. Given a base theory V and an extension encoded by a commutative algebra object A, the representation category of the extension is realized as the category of local A-modules. In logarithmic settings, a technical difficulty is that A is an "infinite algebra" that lives in the ind-completion Ind(Rep(V)), so one must work with finitely generated local modules over an ind-algebra. Using simple current extensions as a guiding example, I will outline how structural results on commutative algebras in braided tensor categories reduce rigidity to checkable algebraic conditions and yield rigidity for finitely generated local modules. This is based on joint work in preparation with Kenichi Shimizu.

Venue : Emmy Noether Seminar Room
Zoom Link: https://icts-res-in.zoom.us/j/94251906983?pwd=e4ijCodUFoOGWAnaiA35nQ8TKljSl3.1
Meeting ID: 942 5190 6983
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