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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS String Seminar

Title : Quasi-characters revisited

Speaker : Sunil Mukhi (Indian Institute of Science Education and Research Pune)

Date : Wednesday, 16 July 2025

Time : 3:30 PM (IST)

Abstract : The modular differential equations that allow us to find rational 2d CFTs have additional solutions that do not correspond to CFT, called "quasi-characters". In the two-character case these have been classified and shown to form a linear basis for all possible admissible characters. The solutions are found to have curious properties, including that the "degeneracies" alternate in sign only up to dimension $c/12$, and have a fixed sign beyond that. I will review the construction and use of quasi-characters and describe recent work to prove these curious properties. This also leads to a way to estimate degeneracies in the intermediate region where the dimensions are of order c , which could have applications to normal characters as well.

Venue : Feynman Lecture Hall

Zoom Link: <https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>

Meeting ID: 880 9276 6911

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