



Department of
Theoretical Physics

Tata-Infosys Lecture Series

Modular Theory and QFT

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Date / Time

- (I) 27 January 2020, 11:30 AM
- (II) 29 January 2020, 11:30 AM
- (III) 30 January 2020, 11:30 AM

Venue:

- (I) A-304, TIFR
- (II, III) AG-66, TIFR



We introduce the Tomita-Takesaki modular theory and discuss its applications to quantum field theory (QFT). We use the modular theory to constrain the correlation functions of quantum fields. Using modular theory we prove that in QFT, as opposed to finite quantum systems, there are no obstructions on sewing local states into a global pure state.