



## ICTS Condensed Matter Seminar

**Title** : Anomalous Continuous Translations

**Speaker** : Nathan Seiberg (Institute for Advanced Study, USA)

**Date** : Friday, 14 February 2025

**Time** : 11:30 AM (IST)

**Abstract** : We will discuss a large class of non-relativistic continuum field theories where the Euclidean symmetry of the classical theory is violated in the quantum theory by an Adler-Bell-Jackiw-like anomaly. In particular, the continuous translation symmetry of the classical theory is broken in the quantum theory to a discrete symmetry. Furthermore, that discrete symmetry is extended by an internal symmetry. We will show that in some cases, the anomalous continuous translation symmetry is resurrected as an exact noninvertible continuous translation symmetry. We will also discuss the relation between this phenomenon and underlying lattice models.

**Venue** : Madhava Lecture Hall

Zoom Link: <https://icts-res-in.zoom.us/j/93023988072?pwd=MAQcmP8fKoO20x4EzD0EtT9E7A8x8m.1>

Meeting ID: 930 2398 8072

Passcode: 141515