



Department of
Theoretical Physics

Tata-Infosys Lecture Series

Thermal equivariance and its applications

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Date / Time : Dec 5th & 6th,
2017, 11.30 am

Dec 7th, 2017, 10.00 am

Venue: A-304, TIFR



I will describe how techniques from topological field theory and equivariant cohomology find a role in physical problems. I will define the notion of thermal equivariance which will involve gauging thermal diffeomorphisms, and argue that these constructions naturally lead to entropy being interpretable as a Noether current. I will outline an application to constructing dissipative hydrodynamic effective actions, reproducing previously known facts about the admissible constitutive relations.