

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

## ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



## Sommerfeld Theory Colloquium

Prof. Daniel Fisher

Stanford

Ecology and Perpetual Evolution in High Dimensions

In a simple, constant environment does evolution continue forever? Does extensive diversification via small genetic and ecological differences? What are general evolutionary consequences of organismic complexity? Hints from long term laboratory evolution experiments and findings from genomic data of extensive within-species bacterial diversity motivate considering these questions. Several simple models of evolution with ecological feedback will be introduced, with the high dimensionality of phenotype space enabling analysis by statistical physics approaches.

Monday, 12 May 2025, 15:15h, Room A348, Theresienstr. 37/III