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Title: “Spectra of thermal holographic correlators and their reconstructions from pole-skipping”

Abstract: The poles of two-point functions in momentum space, which can be computed and analysed using holographic methods, reveal various details of the physical properties of spectra in QFTs. In thermal QFTs, the lowest-energy (IR) gapless mode is usually described by the theory of hydrodynamics. Assuming a known dispersion relation of only a single hydrodynamic mode, I will discuss when and how the reconstruction of the complete spectrum of physical excitations is possible in the corresponding correlator. In the second part of my talk, I will introduce the phenomenon of pole-skipping in such correlators and discuss how the knowledge of a subset of such discrete points can itself be sufficient to reconstruct the entire spectrum.