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Bayesian interpretation of Backus-Gilbert methods

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The problem of extracting spectral densities from Euclidean correlators evaluated on the lattice has been receiving increasing attention. Spectral densities provide a way to access quantities of crucial importance in hadronic physics, such as inclusive decay rates, scattering amplitudes, finite-volume energies, as well as transport coefficients at finite temperature. Many approaches have been developed to tackle this challenging problem. In this talk, we review how Backus-Gilbert methods can be interpreted in the Bayesian framework, focusing on the systematics of the two approaches.

Topical area

Algorithms and Artificial Intelligence

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