

Lecture 9.3 (12:35-01:00)

Spectral Renyi divergence and its robustness

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We study a specific category of statistical divergences for spectral densities of time series: the spectral α -Renyi divergences, which includes the Itakura–Saito divergence as a subset. In this talk, we present a variational representation of spectral Renyi divergence, from which the minimum spectral Renyi divergence estimator is robust to outliers in the frequency domain, unlike the minimum Itakura–Saito divergence estimator.