

Optimizing the Extraction of Cosmological Information from the Latest Spectroscopic Redshift Surveys

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De-noising cosmological covariance matrices using Rotational Invariant estimators

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In this talk, I will explore the potential of de-noising large cosmological covariance matrices using analytical techniques from Random Matrix Theory, particularly the class of Rotational Invariant estimators. I will evaluate the performance of this approach using galaxy clustering statistics and I will compare them with non-linear shrinkage methods, highlighting their advantages and limitations.

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