

## Extracting cosmological information from the shape of cosmic voids

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The emerging field of cosmic void studies provides a powerful probe for testing cosmological models and the properties of large-scale structure. Among the key statistics in this context is the void shape, which can be characterized by the void-galaxy cross-correlation function. This statistic encapsulates valuable information about the underlying cosmological model and the dynamics of the cosmic web.

In this talk, I will present the potential of void shape as a cosmological observable, highlighting its ability to constrain fundamental physics. Additionally, I will discuss key techniques to mitigate systematic effects that can affect its measurement, including the application of velocity reconstruction methods. These advancements pave the way for a more robust use of voids in upcoming spectroscopic surveys, offering complementary insights to traditional large-scale structure probes.

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