

image based cosmology on the large-scale structure

Tuesday, 5 March 2024 16:10 (40 minutes)

After the great success of the perturbation theory of the large-scale structure, we definitely need more accurate and robust tools to expand the analysis to utilize more and more information embedded in the large-scale structure.

One possible approach which has already got great success is to extend the order of expansion to higher order or to use the interpolation method calibrated based on the set of numerical simulations.

Another approach recently proposed is not based on the summary statistics but on the field level inference, that is based on the “image”.

In this talk, I will revisit the recent works based on the image of the large-scale structure, and discuss our recent cosmological analysis based on the machine learning methods.

Presenter: NICHIZAWA, Atsushi J.

Session Classification: Chair: Tsutomu Takeuchi