ASTROPHYSICS SEMINAR SERIES

Institut Spatial de McGill
McGill Space Institute

CRAQ
Understanding the Universe

Credit: HSC-SSP team and NAOJ.

Cosmological probe combination for current and future surveys

ANDRINA NICOLA | *PRINCETON UNIVERSITY*

Recent progress in observational cosmology and the establishment of ΛCDM have relied on the combination of different cosmological probes. These probes are not independent, and their cross-correlations allow for robust tests of the cosmological model and constraining theoretical and observational systematics, making them a promising analysis method for both current and future data.

In this talk, I will outline possible ways in which to extend joint analyses to optimally benefit from upcoming data, and present results on photometric galaxy clustering in the Hyper Suprime Cam DR1 data. I will then discuss the potential of using two-point function statistics of baryon tracers of the matter density to robustly constrain both cosmology and baryonic feedback.

08 MAR 2022 **3:30 PM EST** **YouTube Live**