Abstract:

Thanks to the information of baryon acoustic oscillations (BAO) and redshift-space distortions (RSD), observations of the large-scale structure (LSS) of the Universe can both constrain the expansion history of the Universe and the growth-rate of cosmic structures, offering one of the most powerful cosmological probes. This has led to the construction of increasingly larger galaxy catalogues, of which the Baryon Oscillation Spectroscopic Survey (BOSS) is perhaps the best example. Containing information for 1.2 million galaxies, BOSS is the largest redshift survey available today. In this talk I will summarize some of the cosmological implications of galaxy clustering measurements based on the completed galaxy samples from BOSS.