Baryons in the Universe 2024



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Impact of baryonic physics on small scale anisotropies

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"The Cosmic Microwave data at very small scales are known to probe not only primordial CMB fluctuations but also many extragalactic components such as tSZ, kSZ, CIB, points sources.

I will show how to use the cosmological dependent SZ signatures (tSZ and kSZ) at small scales coherently in a combined analysis of Planck and SPT experiments to retrieve not only cosmological parameters but also reionisation history and hot gas properties. I will focus on on how the assumptions on the gas distribution (pressure profile, scaling relations) impact the results and how we can retrieve the gas properties or marginalise over them in forthcoming observations such as LiteBIRD or CMB-HD."

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