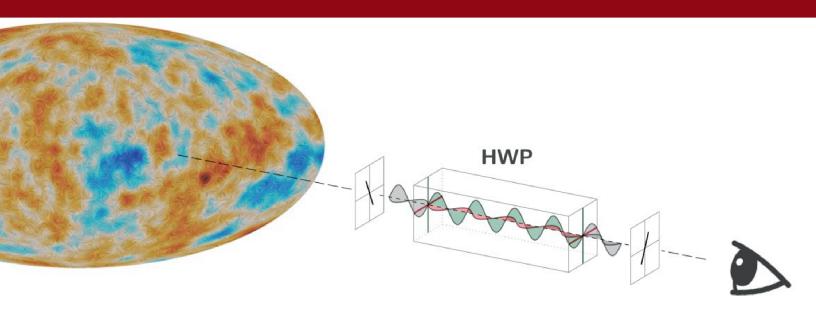
TSI SPECIAL SEMINAR







IMPACT OF HWP SYSTEMATICS ON THE MEASURED CMB POLARIZATION

Marta Monelli Max Planck Institute for Astrophysics

Half-wave plates (HWPs) are becoming a popular choice of polarization modulator in CMB experiments due to several advantages, but their non-idealities represent an additional source of systematics. Understanding how the presence of an HWP can affect the information we extract from the CMB polarization is a necessary step towards developing sound calibration requirements and mitigation strategies. One way to achieve this goal is to perform end-to-end simulations, followed by comprehensive analysis. Alternatively, one can work on analytical descriptions that are less realistic, but better suited to gain intuition. In this talk I'll focus on the latter approach and show how I propagate the HWP non-idealities to the observed CMB angular power spectra.

25-0CT-2023 12:00 PM ET BELL ROOM