



How well can we constrain neutrino mass?

Optical depth remains the biggest factor when considering constraints on massive neutrinos for cosmology
 How advanced is our modelling to be able to constrain tau with 21cm?

Even with Stage IV CMB experiments with shear/clustering we miss out on 3sigma detection of 60 meV neutrino. Are we thinking enough about cross correlations across wavelength? How do we build this into our plans for surveys?

Discussion

- what should be the Canadian priorities for 21cm cosmology studies in the pre-SKA and SKA period?
 - Calibration precision and beam-measurements are open questions that have yet to be demonstrated on the sky
 - how do we balance Canadian-led efforts with international collaborations?
- CMB is transitioning from “small” university led experiments to large international facilities - Simons Observatory, CMB-S4
 - Major new investments from US National Labs.
 - Will Canada’s contributions evolve? Do we need/want national coordination / LRP involvement / NRC contributions?
- Cross-correlations will gain increasing importance as we continue to probe the cosmic web.
 - In era of new, proprietary data, do we have access to the right datasets?
 - Do Canadians have a special role to play, bridging collaborations?