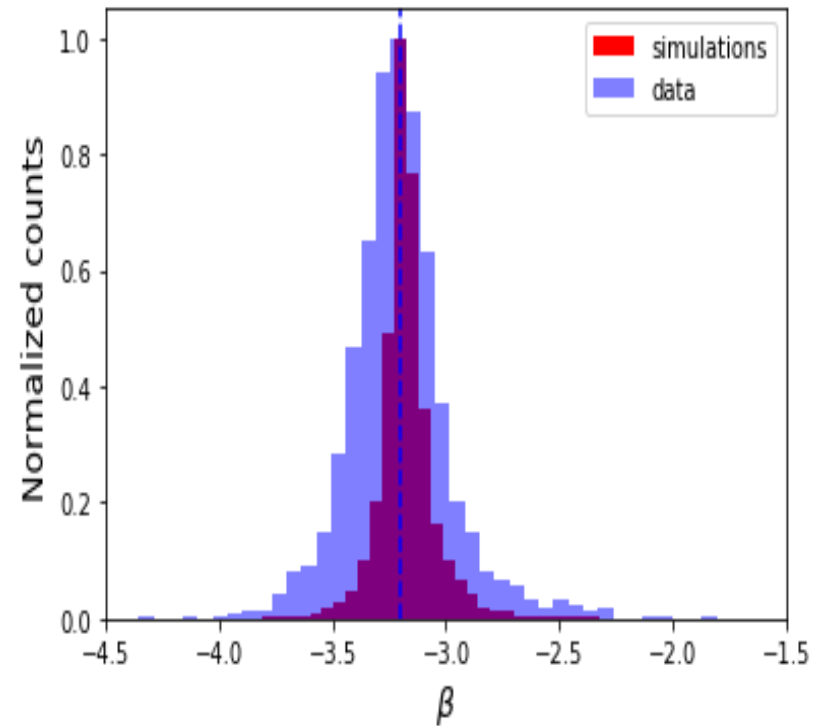
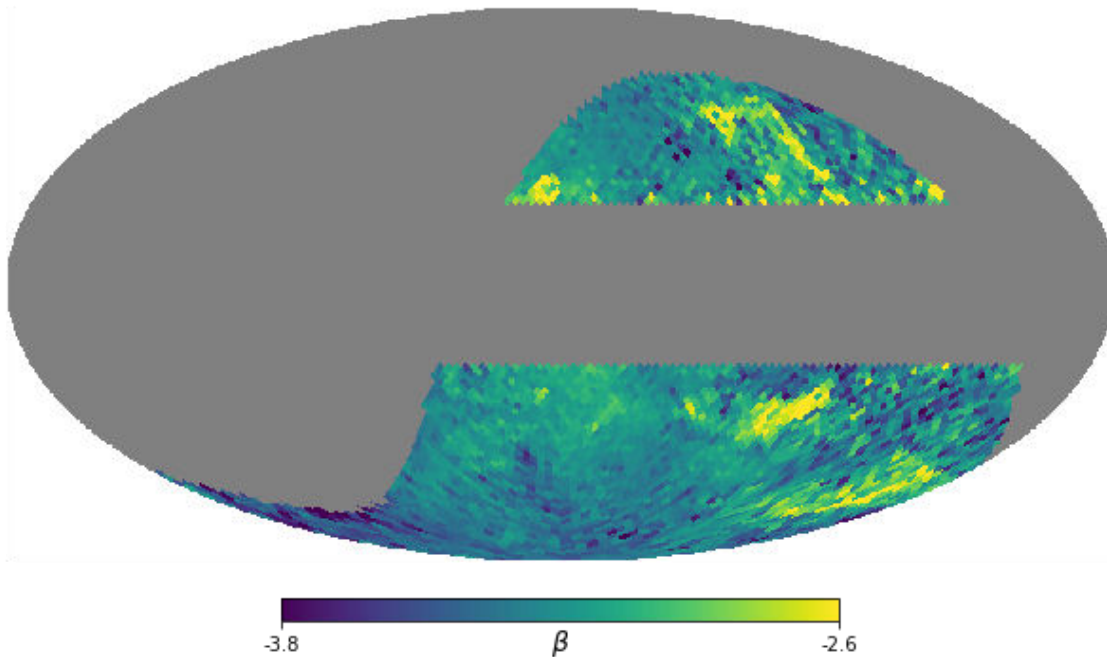


# Reconstructing the Synchrotron Spectral index in CMB Foregrounds



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Polarization modelled as a Rician random variable. Likelihood:

$$p(P_i|A_0, \beta, \sigma_{P_i}) = \frac{P_i}{\sigma_{P_i}^2} \exp\left(-\frac{P_i^2 + P_{i,0}^2}{2\sigma_{P_i}^2}\right) I_0\left(\frac{P_i P_{i,0}}{\sigma_{P_i}^2}\right)$$

Datasets used:

S-PASS, Planck 30, WMAP K-band and Ka-band.

[Krachmalnicoff et al., \(2018\)](#)