Reconstructing the Synchrotron Spectral index in CMB Foregrounds

Raagini Patki, N. Krachmalnicoff, D. Poletti, C. Baccigalupi

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:


Krachmalnicoff et al., (2018)