

# Secondary CMB Anisotropies from Large Scale Structure: Science & Foregrounds

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observable	science	foreground	concern
$\langle BB \rangle$	$r$	$\langle BB \rangle$ ( $\kappa, g, \tau$ )	$\langle BB_{g,\tau} \rangle$ $\langle EBEB_{g,\tau} \rangle$ (delensing)
$I_\nu(\mathbf{n}), \delta_g(\mathbf{n}, z)$ (LSS delensing)	$r, N_{\text{eff}}$	galactic dust & interlopers	$\rho(\text{LSS}, \kappa) < 1$
$\langle \kappa \kappa \rangle$	$\sigma_8, \Sigma M_\nu$	$\langle I_\nu I_\nu \kappa \rangle, \langle I_\nu I_\nu I_\nu I_\nu \rangle$	CIB, tSZ, kSZ non-Gaussianity & SED
$\langle \delta_g \kappa \rangle, \langle \gamma \kappa \rangle$	$w, f_{\text{nl}}, \Sigma M_\nu, b_g$	$\langle g I_\nu I_\nu \rangle$	CIB, tSZ, kSZ non-Gaussianity & SED
$\langle \delta_g \Delta T_{\text{kSZ}} \rangle$	$f(\mathbf{R}), \Sigma M_\nu$ galaxy formation	$\langle \Delta T_p \Delta T_p \rangle$	alignment effects & feedback uncertainties
$\langle \Delta T_{\text{kSZ}} \Delta T_{\text{kSZ}} \rangle$	eor, galaxy formation	$\langle I_\nu y \rangle$	CIB, tSZ, kSZ non-Gaussianity & SED
$\langle yy \rangle$	$\sigma_8,$ galaxy formation	$\langle I_\nu y \rangle$	alignment effects & feedback uncertainties
$n_c(z, M)$	$\sigma_8, \Sigma M_\nu,$ galaxy formation	$\langle I_\nu y \rangle$	alignment effects & feedback uncertainties