Cosmological Signal/Instrumental Noise Models for LIM

$K^2_{\mathrm{LIM}}(z)\,P_m(k, z = 0)$ $[(\mathrm{Jy/sr})^2 \mathrm{Mpc}^3]$

k [1/Mpc]

CHIME [HI] — $z = 1.0$, $z = 1.3$ — Instrumental Noise Power P^{ϵ_I}, Accessible $k_\perp$, Accessible $k_\parallel$

HETDEX [Ly-α] — $z = 1.9$, $z = 3.5$ — Instrumental Noise Power P^{ϵ_I}, Accessible $k_\perp$, Accessible $k_\parallel$

COMAP [CO(1 $\to$ 0)] — $z = 2.4$, $z = 3.4$ — Instrumental Noise Power P^{ϵ_I}, Accessible $k_\parallel$, Accessible $k_\perp$

CCAT-prime [CII] — $z = 3.5$, $z = 8.1$ — Instrumental Noise Power P^{ϵ_I}, Accessible $k_\parallel$, Accessible $k_\perp$

SPHEREx [Ly-α] — $z = 5.0$, $z = 8.0$ — Instrumental Noise Power P^{ϵ_I}, Accessible $k_\parallel$, Accessible $k_\perp$