LiteBIRD r statistics

Aditya Rotti

Case	Moments	Paramete
cMILC00	$I_{\rm CMB}$	1
cMILC01	$I_{\rm CMB}$; $I_{\rm sync}$	2
cMILC02	$I_{\rm CMB}$; $I_{\rm dust}$	2
cMILC03	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$	3
cMILC04	$I_{\rm CMB}$; $I_{\rm dust}$; $\frac{dI_{\rm dust}}{d\beta}$	3
cMILC05	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm dust}}{d\beta}$	4
cMILC06	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm dust}}{d\beta}$ (H)	4
cMILC07	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$	5
cMILC08	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$	6
cMILC09	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$	7
cMILC10	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$	8
cMILC11	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$; $\frac{d^2I_{\rm dust}}{d\beta dT}$	9
cMILC12	$I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$; $\frac{d^2I_{\rm dust}}{d\beta dT}$; $\frac{d^2I_{\rm dust}}{d^2\beta}$	10

Case	Alens	r_{bias}	σ_r	r_{95}	SNR
cMILC00	0.0	0.00401	0.00037	NaN	10.99237
	0.3	0.00373	0.00043	NaN	8.67841
	0.6	0.00337	0.00054	NaN	6.21216
	0.9	0.00313	0.00065	NaN	4.81425
cMILC01	0.0	0.00359	0.00049	NaN	7.39762
	0.3	0.00349	0.00052	NaN	6.66955
	0.6	0.00327	0.00059	NaN	5.51182
	0.9	0.00311	0.00068	NaN	4.54640
cMILC02	0.0	0.00393	0.00038	NaN	10.47086
	0.3	0.00361	0.00043	NaN	8.33606
	0.6	0.00319	0.00055	NaN	5.83180
	0.9	0.00290	0.00066	NaN	4.39134
cMILC03	0.0	0.00340	0.00049	NaN	6.91414
	0.3	0.00329	0.00053	NaN	6.19613
	0.6	0.00304	0.00060	NaN	5.03730
	0.9	0.00284	0.00070	NaN	4.07834
cMILC04	0.0	0.00288	0.00078	NaN	3.70185
	0.3	0.00287	0.00080	NaN	3.58590
	0.6	0.00281	0.00084	NaN	3.32949
	0.9	0.00275	0.00093	NaN	2.96107
cMILC05	0.0	0.00139	0.00100	0.00345	1.38799
	0.3	0.00140	0.00101	0.00348	1.38040
	0.6	0.00141	0.00104	0.00355	1.36050
	0.9	0.00144	0.00108	0.00367	1.32606
cMILC06	0.0	0.00219	0.00095	NaN	2.31224
	0.3	0.00192	0.00097	0.00391	1.98323
	0.6	0.00170	0.00101	0.00377	1.68239
	0.9	0.00161	0.00106	0.00380	1.51801
cMILC07	0.0	0.00157	0.00278	0.00737	0.56574
	0.3	0.00157	0.00278	0.00738	0.56540
	0.6	0.00158	0.00278	0.00739	0.56743
	0.9	0.00158	0.00279	0.00741	0.56577
cMILC08	0.0	0.00096	0.00563	0.01381	0.17038
	0.3	0.00096	0.00563	0.01381	0.17038
	0.6	0.00096	0.00563	0.01381	0.17038

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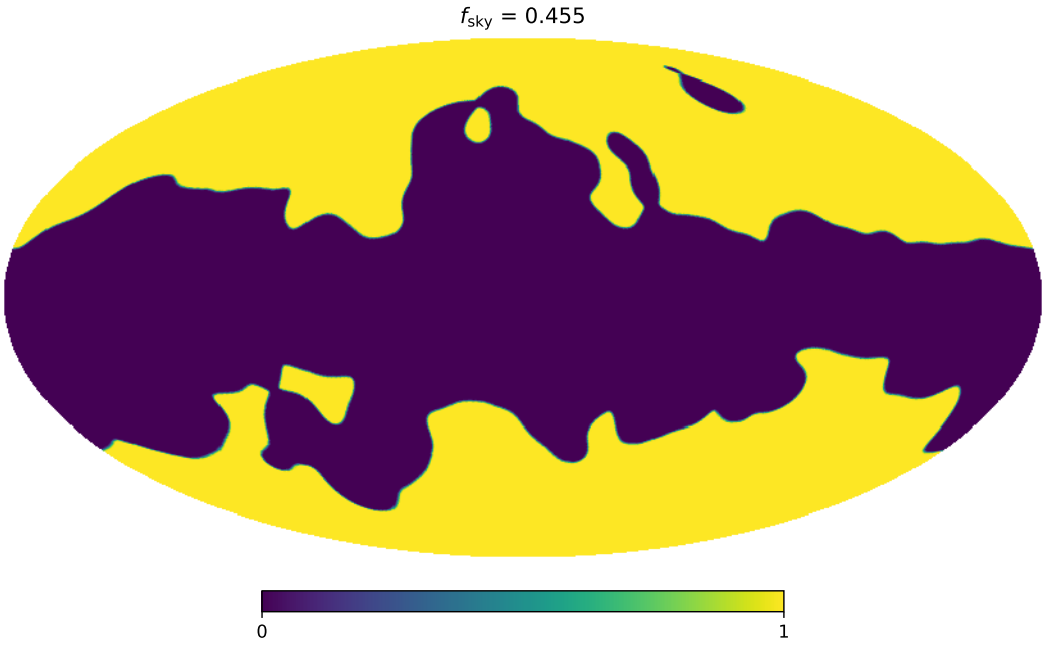
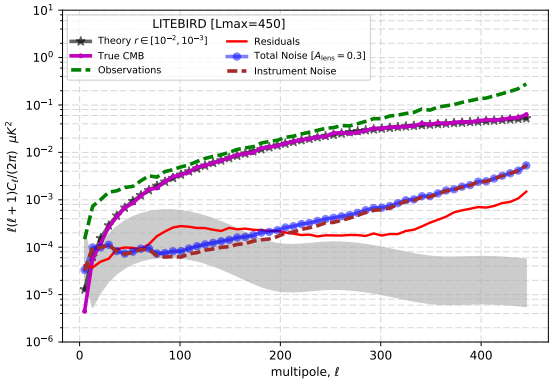
Case	Alens	r_{bias}	σ_r	r_{95}	SNR
	0.9	0.00096	0.00563	0.01381	0.17038
cMILC09	0.0	0.00084	NaN	NaN	NaN
	0.3	0.00084	NaN	NaN	NaN
	0.6	0.00084	NaN	NaN	NaN
	0.9	0.00084	NaN	NaN	NaN
cMILC10	0.0	0.00412	NaN	NaN	NaN
	0.3	0.00412	NaN	NaN	NaN
	0.6	0.00412	NaN	NaN	NaN
	0.9	0.00412	NaN	NaN	NaN
cMILC11	0.0	0.05000	NaN	NaN	NaN
	0.3	0.05000	NaN	NaN	NaN
	0.6	0.05000	NaN	NaN	NaN
	0.9	0.05000	NaN	NaN	NaN
cMILC12	0.0	0.05000	NaN	NaN	NaN
	0.3	0.05000	NaN	NaN	NaN
	0.6	0.05000	NaN	NaN	NaN
	0.9	0.05000	NaN	NaN	NaN

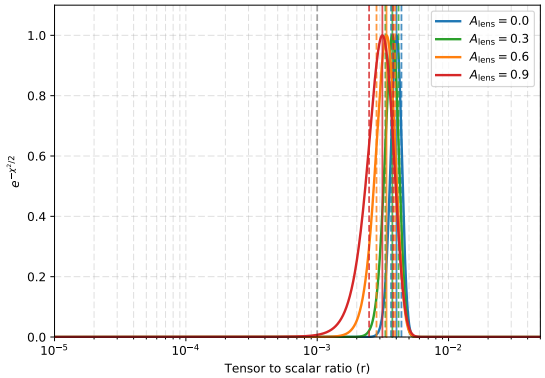


1 Mask

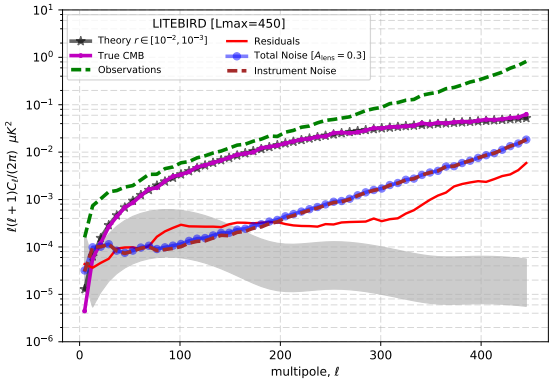
2 Posterior plots

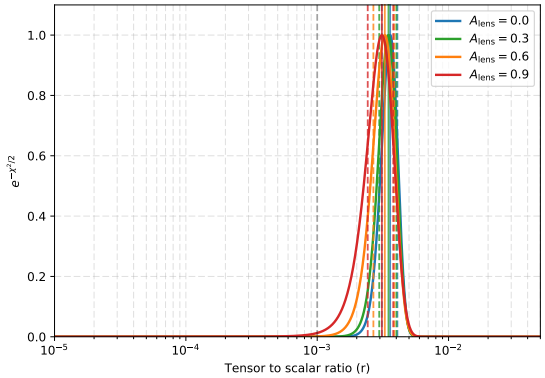
cMILC00 : $I_{\rm CMB}$



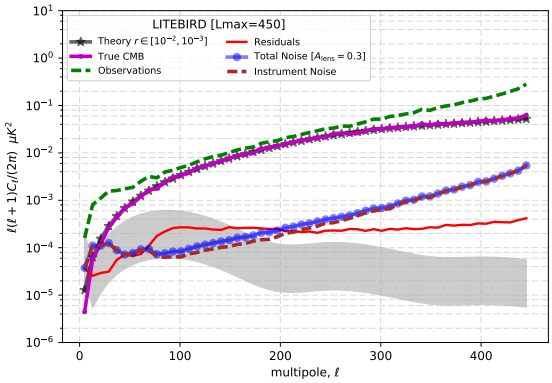


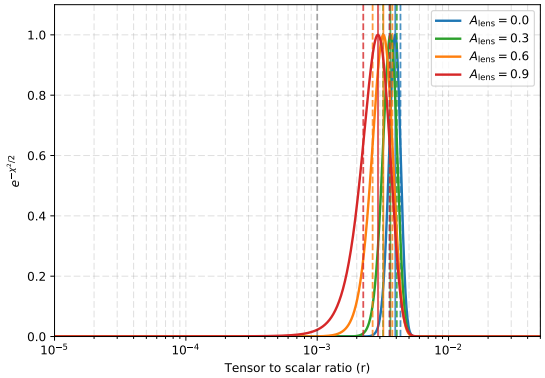
cMILC01 : $I_{\rm CMB}$; $I_{\rm sync}$



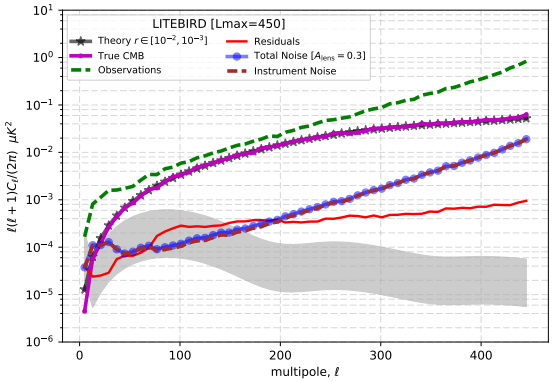


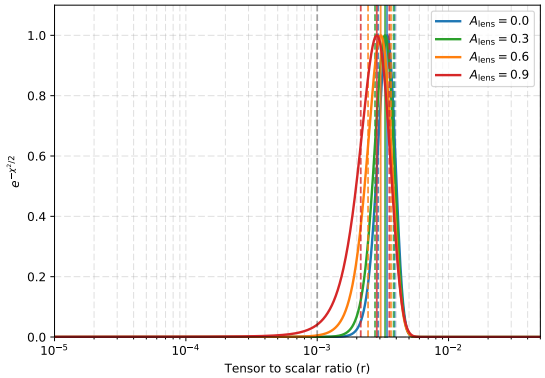
cMILC02 : $I_{\rm CMB}$; $I_{\rm dust}$



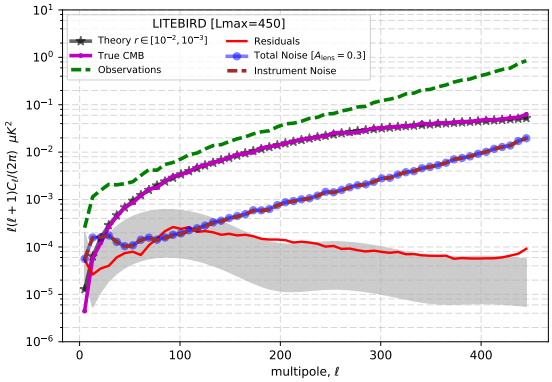


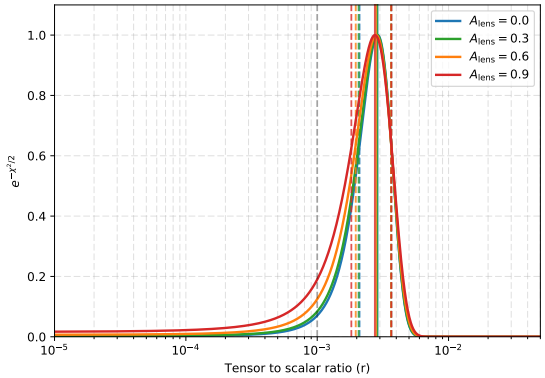
cMILC03 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$



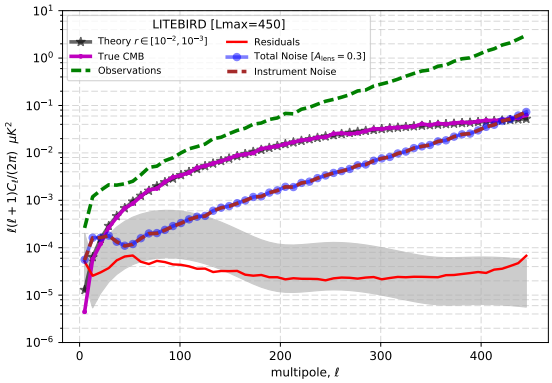


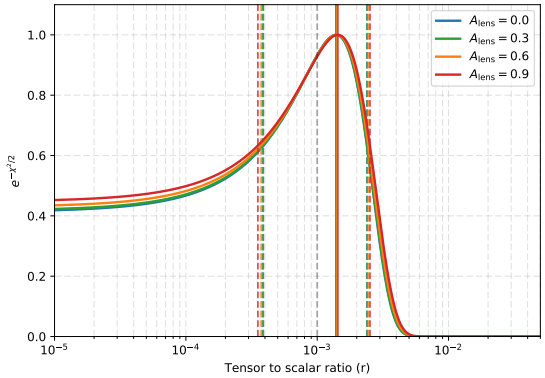
cMILC04 : $I_{\rm CMB}$; $I_{\rm dust}$; $\frac{dI_{\rm dust}}{d\beta}$



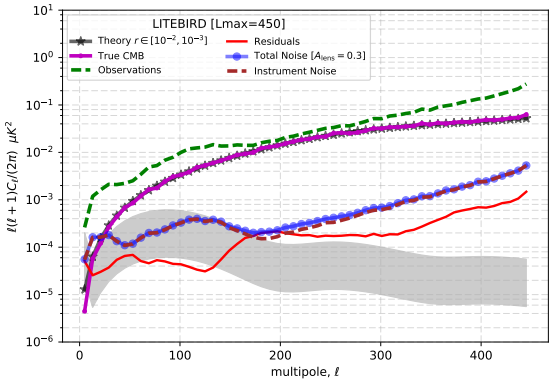


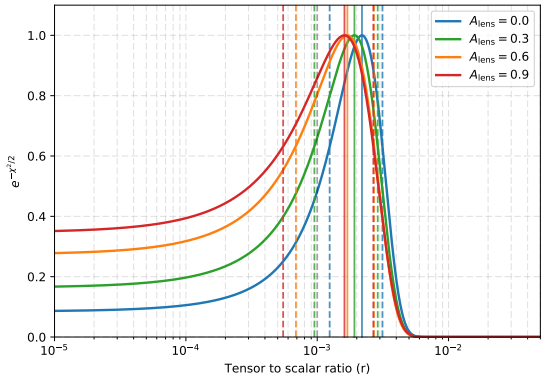
cMILC05 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm dust}}{d\beta}$



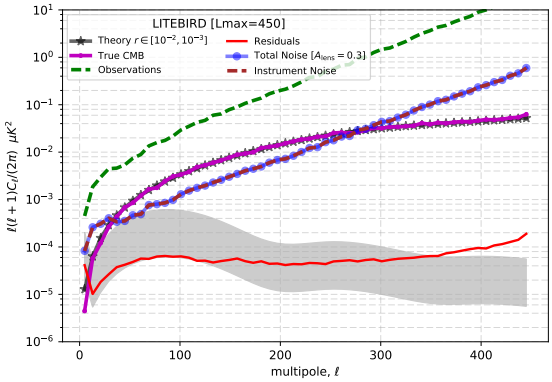


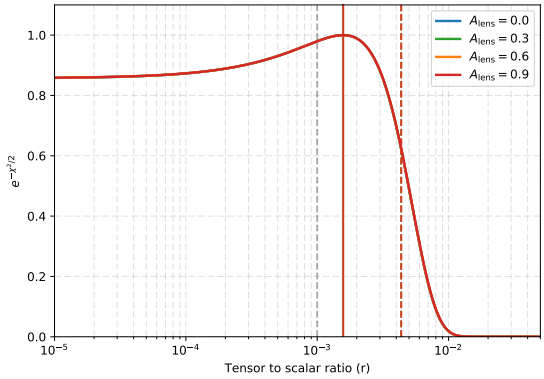
cMILC06 : I_{CMB} ; I_{sync} ; I_{dust} ; $\frac{dI_{dust}}{d\beta}$ (H)



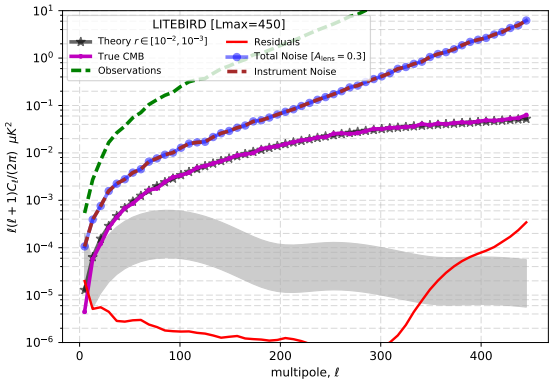


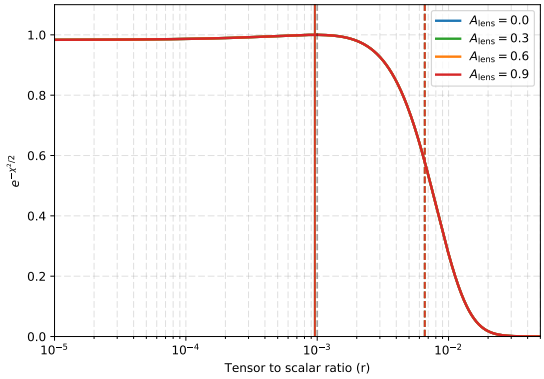
cMILC07 : I_{CMB} ; I_{sync} ; I_{dust} ; $\frac{dI_{sync}}{d\beta}$; $\frac{dI_{dust}}{d\beta}$



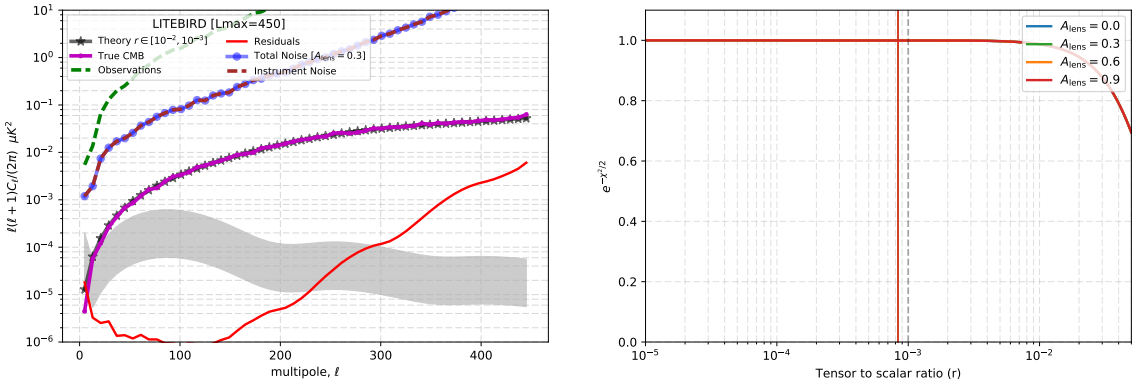


cMILC08 : I_{CMB} ; I_{sync} ; I_{dust} ; $\frac{dI_{sync}}{d\beta}$; $\frac{dI_{dust}}{d\beta}$; $\frac{dI_{dust}}{dT}$

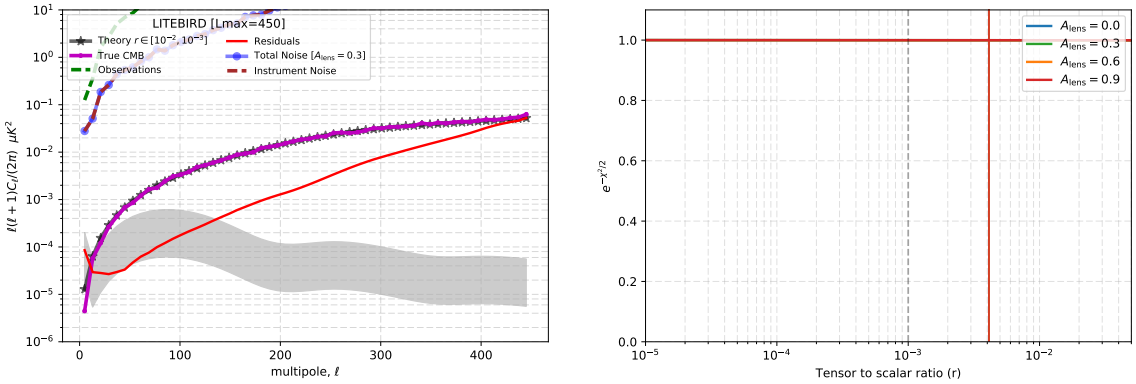




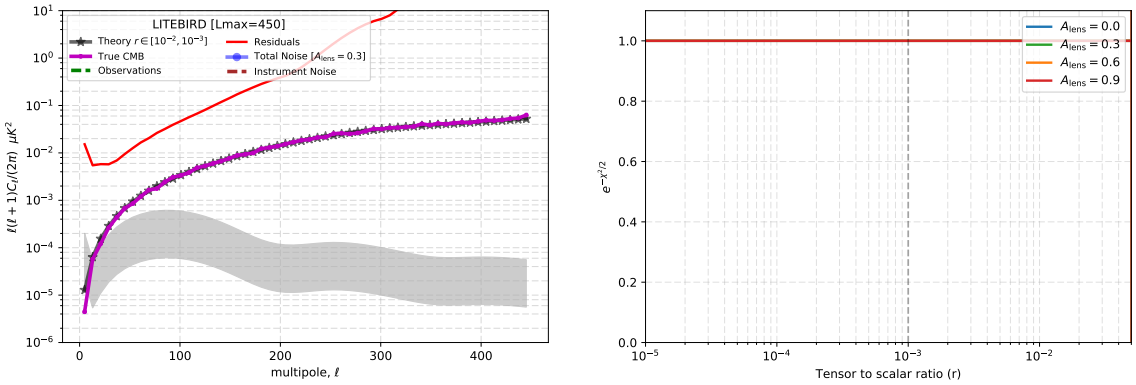
cMILC09 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$



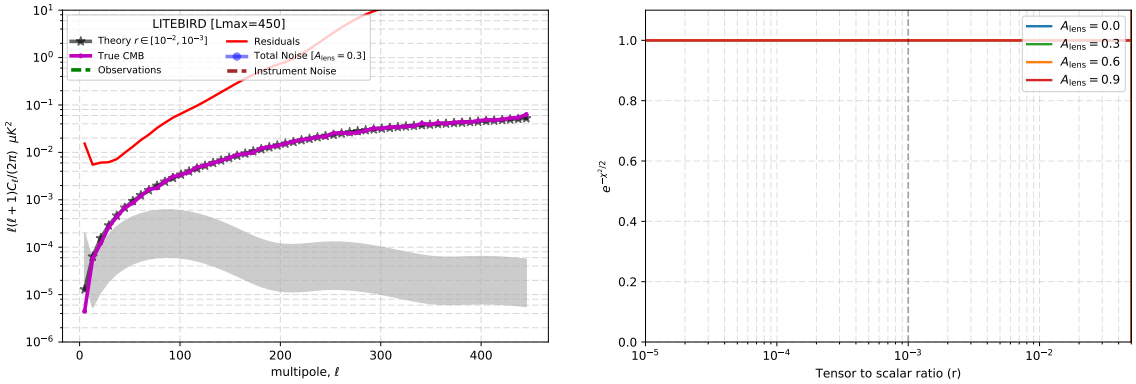
cMILC10 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$



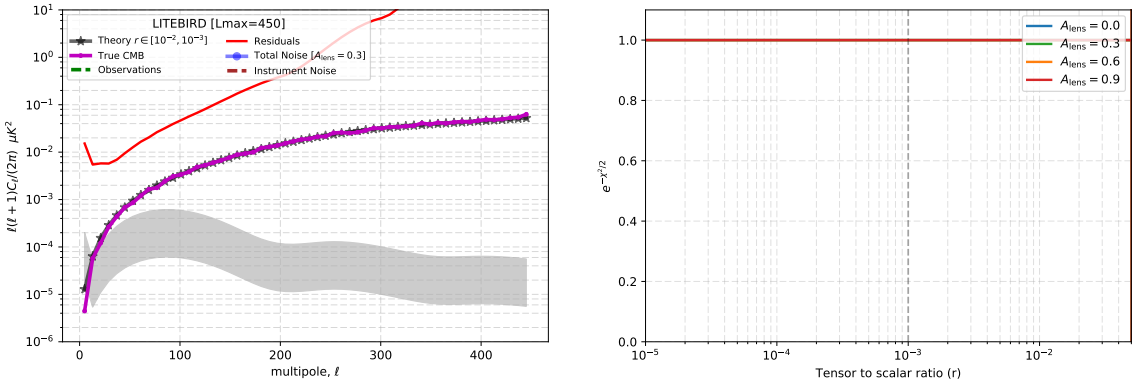
cMILC11 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$; $\frac{d^2I_{\rm dust}}{d\beta dT}$



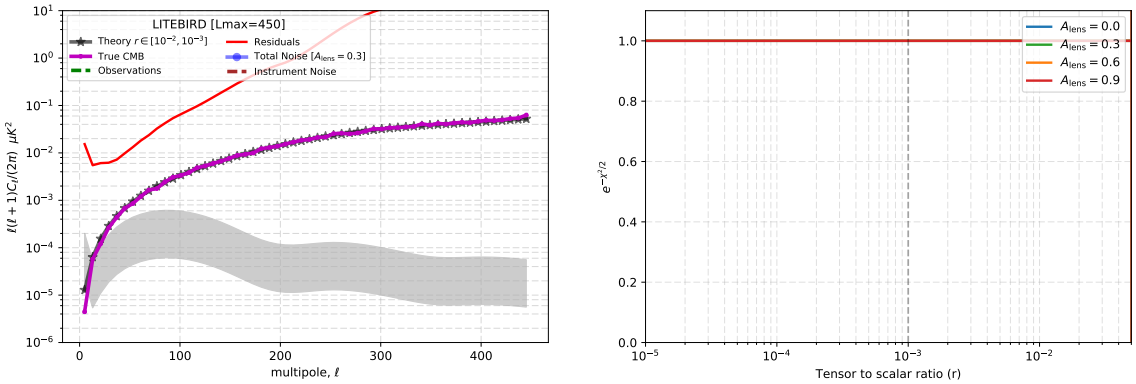
cMILC12 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$; $\frac{d^2I_{\rm dust}}{d\beta dT}$; $\frac{d^2I_{\rm dust}}{d^2\beta}$

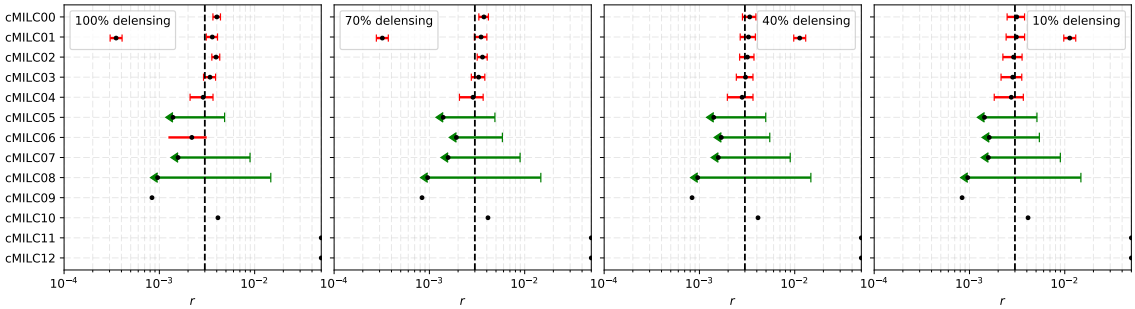


cMILC13 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$; $\frac{d^2I_{\rm dust}}{d\beta dT}$



cMILC14 : $I_{\rm CMB}$; $I_{\rm sync}$; $I_{\rm dust}$; $\frac{dI_{\rm sync}}{d\beta}$; $\frac{dI_{\rm dust}}{d\beta}$; $\frac{dI_{\rm dust}}{dT}$; $\frac{d^2I_{\rm sync}}{d^2\beta}$; $\frac{d^2I_{\rm dust}}{d^2T}$; $\frac{d^2I_{\rm dust}}{d\beta dT}$; $\frac{d^2I_{\rm dust}}{d^2\beta}$





3 r constraints