

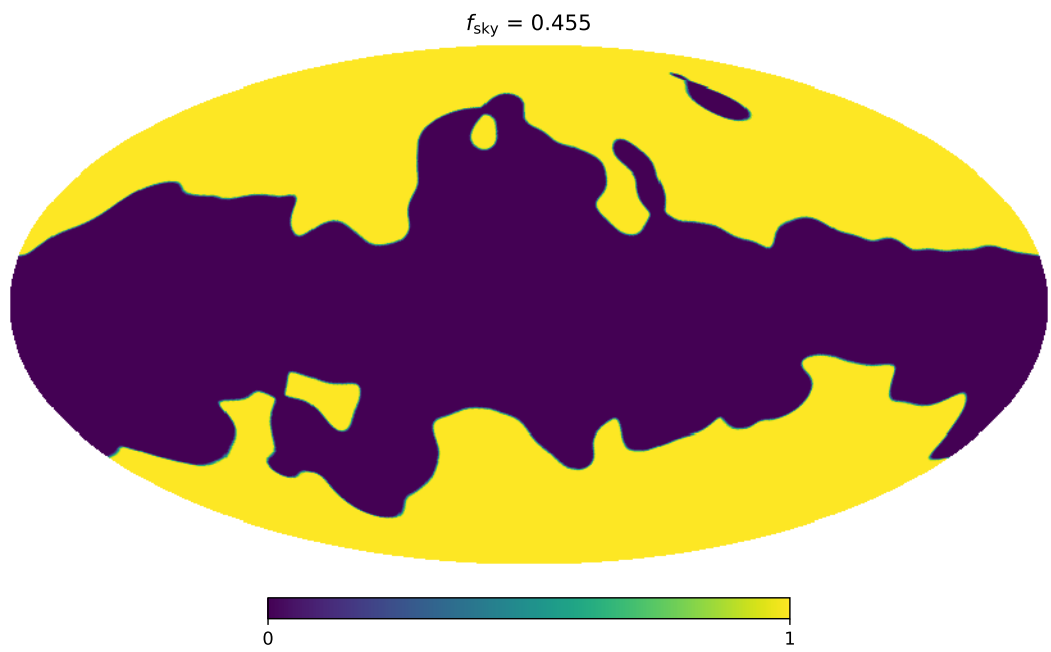
PICO r statistics

Aditya Rotti

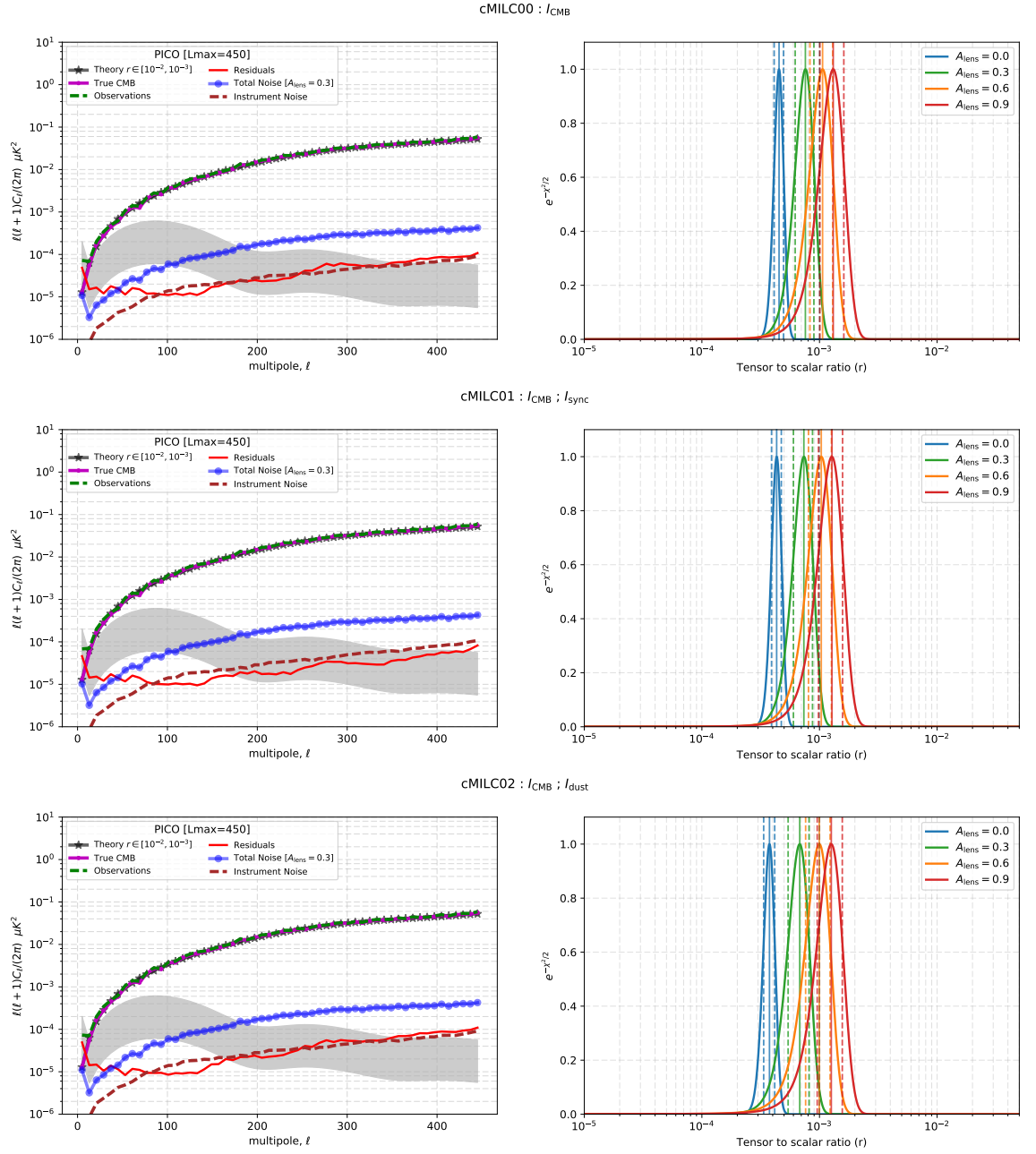
Case	Moments	Parameters
cMILC00	I_{CMB}	1
cMILC01	$I_{\text{CMB}} ; I_{\text{sync}}$	2
cMILC02	$I_{\text{CMB}} ; I_{\text{dust}}$	2
cMILC03	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}}$	3
cMILC04	$I_{\text{CMB}} ; I_{\text{dust}} ; \frac{dI_{\text{dust}}}{d\beta}$	3
cMILC05	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{dust}}}{d\beta}$	4
cMILC06	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} \text{ (H)}$	5
cMILC07	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT}$	6
cMILC08	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{dust}}}{d^2 T}$	7
cMILC09	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{dust}}}{d^2 T} \text{ (H)}$	7
cMILC10	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{sync}}}{d^2 \beta} ; \frac{d^2 I_{\text{dust}}}{d^2 T}$	8
cMILC11	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{sync}}}{d^2 \beta} ; \frac{d^2 I_{\text{dust}}}{d^2 T} \text{ (H)}$	8
cMILC12	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{sync}}}{d^2 \beta} ; \frac{d^2 I_{\text{dust}}}{d^2 T} ; \frac{d^2 I_{\text{dust}}}{d\beta dT}$	9
cMILC13	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{sync}}}{d^2 \beta} ; \frac{d^2 I_{\text{dust}}}{d^2 T} ; \frac{d^2 I_{\text{dust}}}{d\beta dT} \text{ (H)}$	9
cMILC14	$I_{\text{CMB}} ; I_{\text{sync}} ; I_{\text{dust}} ; \frac{dI_{\text{sync}}}{d\beta} ; \frac{dI_{\text{dust}}}{d\beta} ; \frac{dI_{\text{dust}}}{dT} ; \frac{d^2 I_{\text{sync}}}{d^2 \beta} ; \frac{d^2 I_{\text{dust}}}{d^2 T} ; \frac{d^2 I_{\text{dust}}}{d\beta dT} ; \frac{d^2 I_{\text{dust}}}{d^2 \beta}$	10

Case	Alens	r_{bias}	σ_r	r_{95}	SNR
cMILC00	0.0	0.00045	0.00004	NaN	10.96101
	0.3	0.00076	0.00014	NaN	5.52891
	0.6	0.00106	0.00023	NaN	4.57118
	0.9	0.00131	0.00030	NaN	4.34084
cMILC01	0.0	0.00043	0.00004	NaN	10.48471
	0.3	0.00074	0.00014	NaN	5.41133
	0.6	0.00104	0.00023	NaN	4.52892
	0.9	0.00128	0.00030	NaN	4.31253
cMILC02	0.0	0.00038	0.00004	NaN	9.30189
	0.3	0.00068	0.00014	NaN	4.91773
	0.6	0.00100	0.00023	NaN	4.25387
	0.9	0.00126	0.00030	NaN	4.15601
cMILC03	0.0	0.00036	0.00004	NaN	8.80855
	0.3	0.00066	0.00014	NaN	4.79240
	0.6	0.00098	0.00023	NaN	4.20969
	0.9	0.00124	0.00030	NaN	4.13041
cMILC04	0.0	0.00036	0.00004	NaN	8.37016
	0.3	0.00065	0.00014	NaN	4.55122
	0.6	0.00100	0.00026	NaN	3.84057
	0.9	0.00133	0.00035	NaN	3.76803
cMILC05	0.0	0.00034	0.00004	NaN	7.77220
	0.3	0.00064	0.00014	NaN	4.45425
	0.6	0.00098	0.00025	NaN	3.85353
	0.9	0.00130	0.00034	NaN	3.82056
cMILC06	0.0	0.00021	0.00006	NaN	3.68799
	0.3	0.00043	0.00014	NaN	2.99627
	0.6	0.00077	0.00025	NaN	3.11780
	0.9	0.00110	0.00032	NaN	3.39903
cMILC07	0.0	0.00035	0.00007	NaN	4.93120
	0.3	0.00056	0.00015	NaN	3.60305
	0.6	0.00086	0.00027	NaN	3.20814
	0.9	0.00120	0.00036	NaN	3.29592
cMILC08	0.0	0.00038	0.00009	NaN	4.05566
	0.3	0.00040	0.00010	NaN	3.83700
	0.6	0.00042	0.00013	NaN	3.36847
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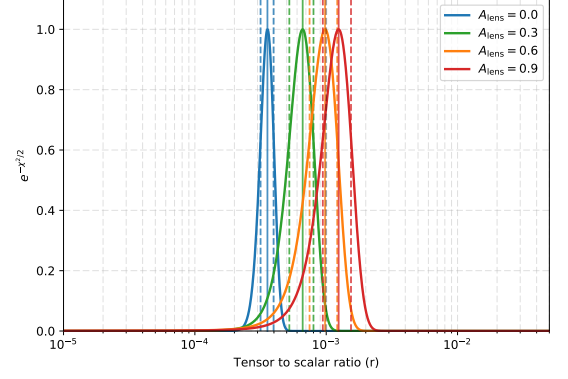
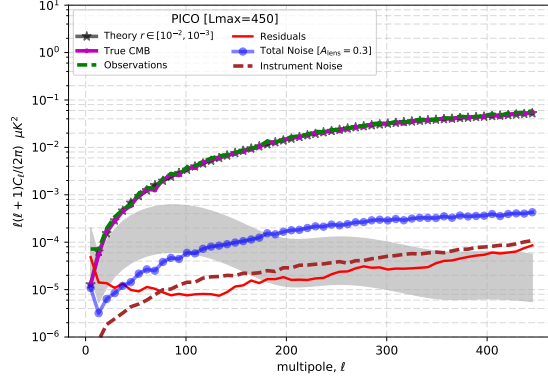
Case	Alens	r_{bias}	σ_r	r_{95}	SNR
cMILC09	0.9	0.00044	0.00021	NaN	2.13249
	0.0	0.00032	0.00006	NaN	5.10452
	0.3	0.00039	0.00010	NaN	3.91669
	0.6	0.00042	0.00013	NaN	3.39883
cMILC10	0.9	0.00044	0.00020	NaN	2.15525
	0.0	0.00048	0.00014	NaN	3.56701
	0.3	0.00048	0.00014	NaN	3.44644
	0.6	0.00048	0.00024	NaN	2.02059
cMILC11	0.9	0.00048	0.00026	0.00110	1.83891
	0.0	0.00085	0.00024	NaN	3.60809
	0.3	0.00049	0.00014	NaN	3.46043
	0.6	0.00048	0.00024	NaN	2.03003
cMILC12	0.9	0.00048	0.00026	0.00110	1.85032
	0.0	0.00052	0.00331	0.00806	0.15758
	0.3	0.00052	0.00331	0.00806	0.15757
	0.6	0.00052	0.00331	0.00806	0.15681
cMILC13	0.9	0.00052	0.00331	0.00807	0.15674
	0.0	0.00340	0.00058	NaN	5.82329
	0.3	0.00159	0.00253	0.00698	0.62700
	0.6	0.00090	0.00301	0.00752	0.29741
cMILC14	0.9	0.00071	0.00315	0.00773	0.22391
	0.0	0.00075	NaN	NaN	NaN
	0.3	0.00075	NaN	NaN	NaN
	0.6	0.00075	NaN	NaN	NaN
	0.9	0.00075	NaN	NaN	NaN



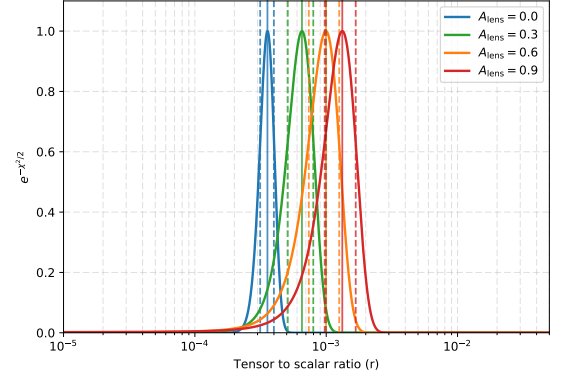
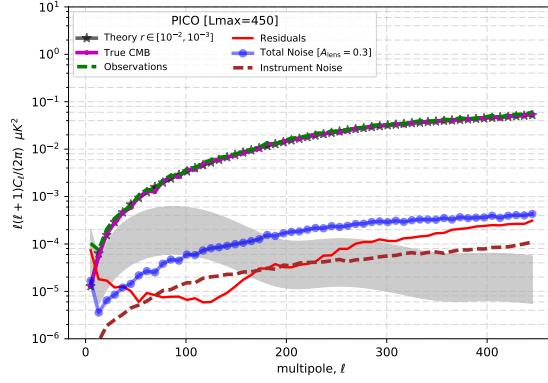
- 1 Mask
- 2 Posterior plots



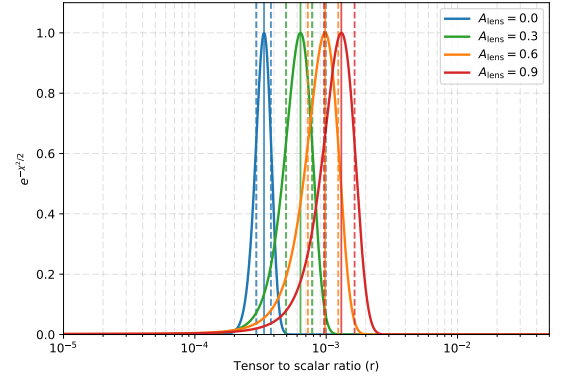
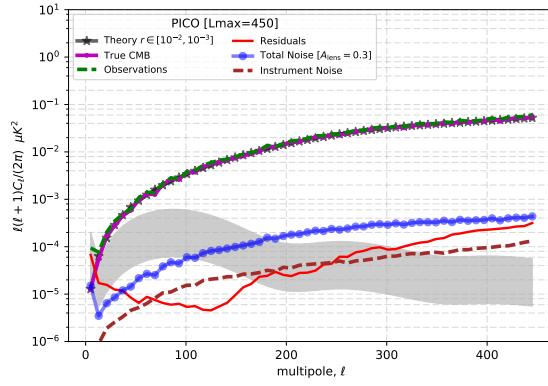
cMILC03 : l_{CMB} ; l_{sync} ; l_{dust}

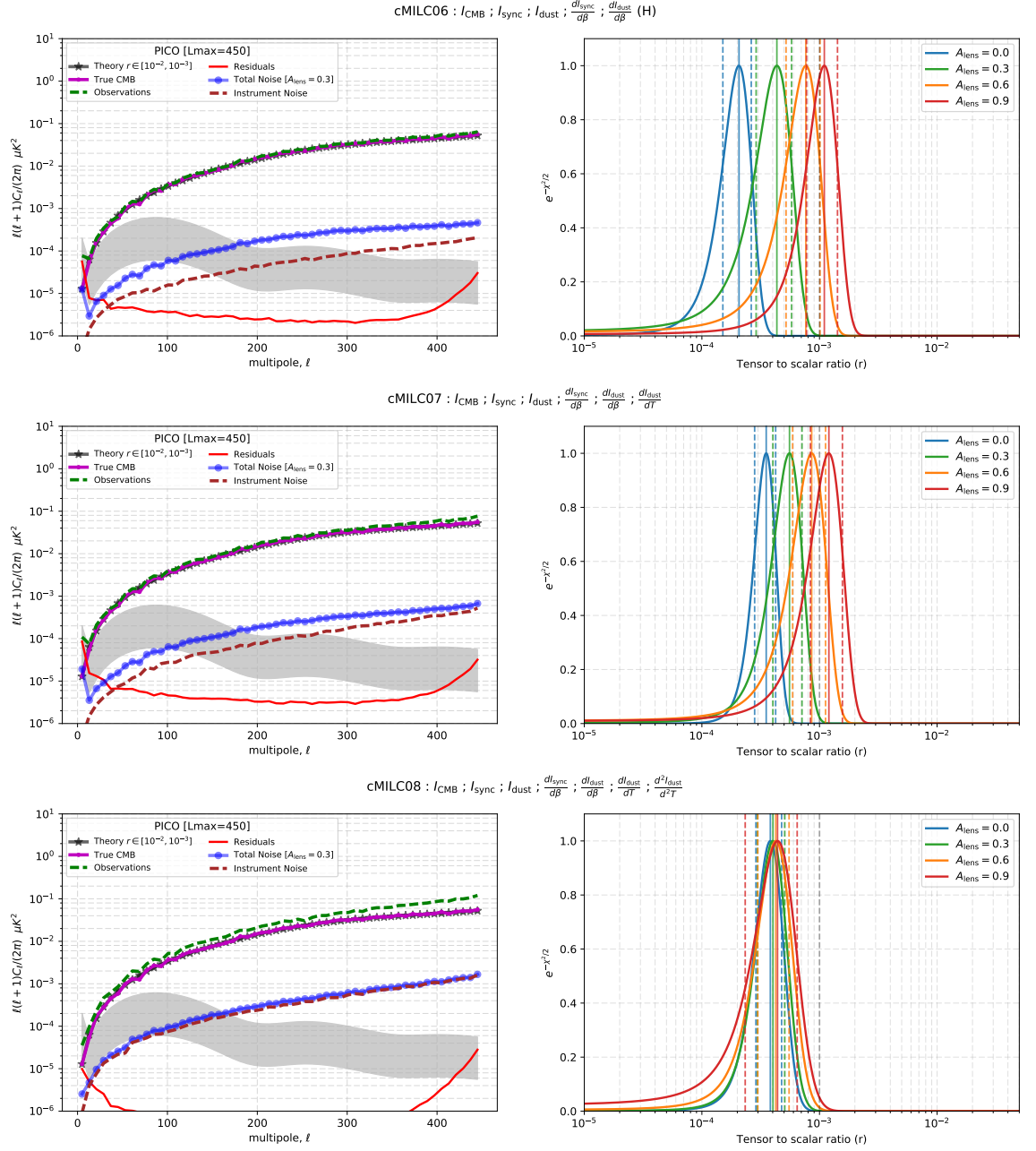


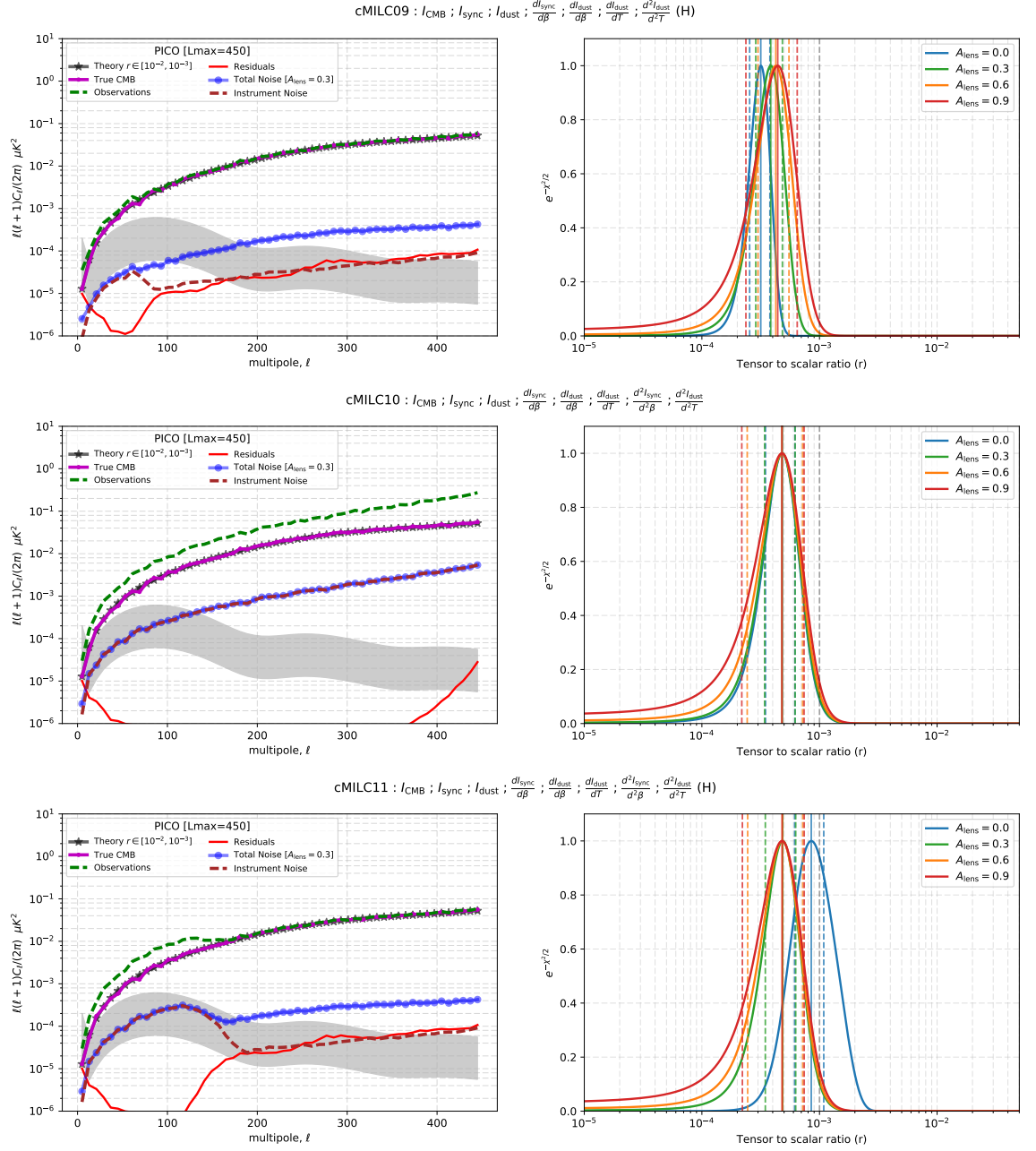
cMILC04 : l_{CMB} ; l_{dust} ; $\frac{dl_{\text{sync}}}{d\beta}$

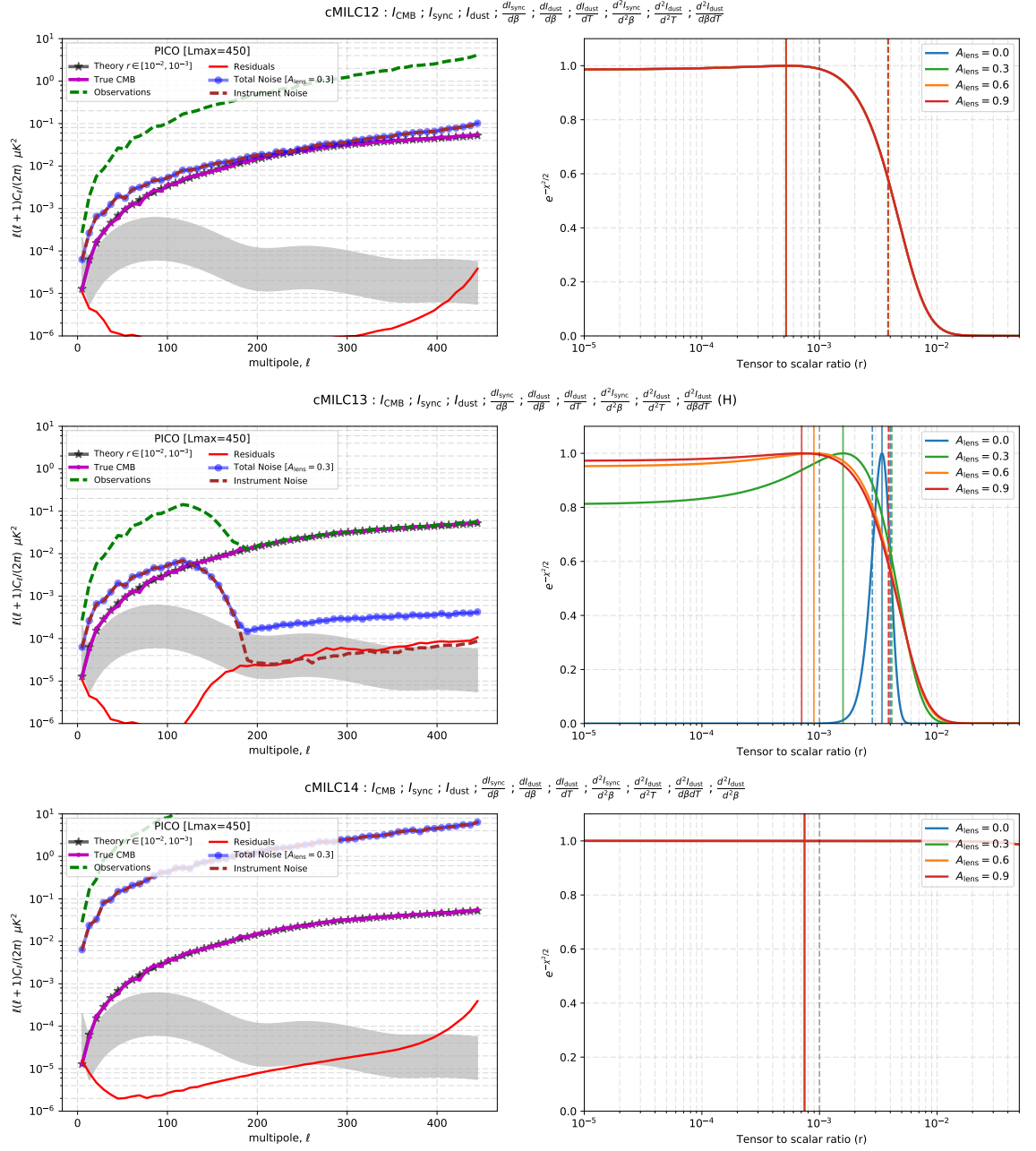


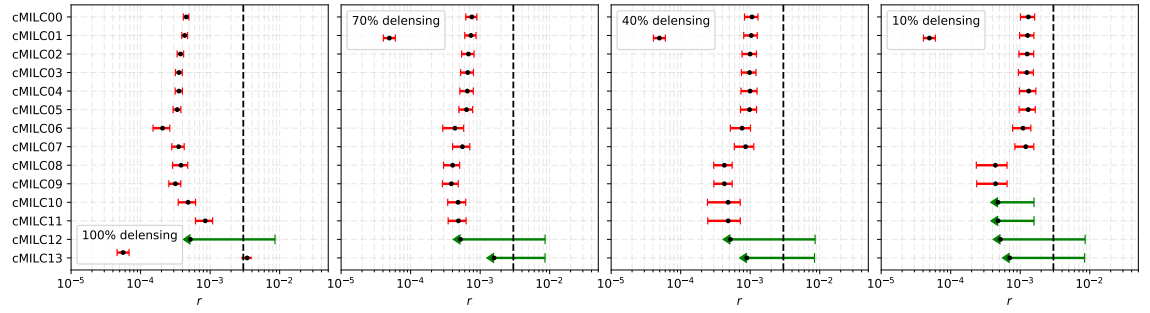
cMILC05 : l_{CMB} ; l_{sync} ; l_{dust} ; $\frac{dl_{\text{sync}}}{d\beta}$











3 r constraints