

CG model with $d = 20$ and $n = m = 2 \cdot 10^4$						
μ -deformation			Σ_{ii} -deformation			
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.07086^{+0.034}_{-0.031}$	$0.09763^{+0.033}_{-0.03}$	496	$0.03243^{+0.0098}_{-0.01}$	$0.04336^{+0.0093}_{-0.0091}$	525
$t_{\overline{KS}}$	$0.06957^{+0.034}_{-0.032}$	$0.09504^{+0.032}_{-0.032}$	366	$0.04632^{+0.015}_{-0.015}$	$0.06199^{+0.014}_{-0.014}$	387
t_{SKS}	$0.0699^{+0.033}_{-0.031}$	$0.09548^{+0.032}_{-0.03}$	579	$0.04131^{+0.013}_{-0.014}$	$0.05484^{+0.012}_{-0.012}$	620
t_{FGD}	$0.07185^{+0.041}_{-0.032}$	$0.09756^{+0.038}_{-0.03}$	1094	$0.0269^{+0.01}_{-0.0088}$	$0.03574^{+0.0091}_{-0.0081}$	1179
t_{MMD}	$0.08449^{+0.064}_{-0.049}$	$0.11846^{+0.06}_{-0.045}$	1574	$0.03081^{+0.026}_{-0.018}$	$0.04364^{+0.024}_{-0.017}$	1679
t_{LLR}	$0.01053^{+0.0046}_{-0.0046}$	$0.01415^{+0.0045}_{-0.0047}$	1306	$0.00253^{+0.0013}_{-0.0014}$	$0.00353^{+0.0013}_{-0.0014}$	1504
$\Sigma_{i \neq j}$ -deformation			pow $_+$ -deformation			
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.02056^{+0.0054}_{-0.0064}$	$0.0289^{+0.0052}_{-0.0049}$	2601	$0.00681^{+0.0027}_{-0.0027}$	$0.00928^{+0.0025}_{-0.0025}$	566
$t_{\overline{KS}}$	$1.04753^{+0.011}_{-0.016}$	$1.06042^{+0.017}_{-0.011}$	2455	$0.00901^{+0.0033}_{-0.0034}$	$0.01206^{+0.003}_{-0.0032}$	422
t_{SKS}	$0.02376^{+0.0074}_{-0.0087}$	$0.0331^{+0.007}_{-0.0075}$	2725	$0.00745^{+0.0027}_{-0.0029}$	$0.0099^{+0.0025}_{-0.0026}$	632
t_{FGD}	$0.00391^{+0.00087}_{-0.001}$	$0.00511^{+0.0009}_{-0.00078}$	4251	$0.00623^{+0.003}_{-0.0025}$	$0.00837^{+0.0027}_{-0.0023}$	1085
t_{MMD}	$0.02228^{+0.014}_{-0.0095}$	$0.03053^{+0.014}_{-0.0095}$	4399	$0.00488^{+0.0042}_{-0.0029}$	$0.00687^{+0.0039}_{-0.0027}$	1853
t_{LLR}	$0.01946^{+0.0075}_{-0.0066}$	$0.02485^{+0.0049}_{-0.0073}$	3969	$0.00069^{+0.0004}_{-0.0004}$	$0.00098^{+0.00039}_{-0.0004}$	1628
pow $_-$ -deformation			\mathcal{N} -deformation			
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.00748^{+5}_{-0.0026}$	$0.01003^{+5}_{-0.0024}$	513	$0.36054^{+0.048}_{-0.063}$	$0.42418^{+0.041}_{-0.045}$	472
$t_{\overline{KS}}$	$0.00946^{+0.003}_{-0.0031}$	$0.01227^{+0.0029}_{-0.0028}$	418	$0.40421^{+0.061}_{-0.079}$	$0.47653^{+0.053}_{-0.058}$	353
t_{SKS}	$0.00803^{+0.0027}_{-0.0029}$	$0.01046^{+0.0025}_{-0.0026}$	635	$0.35347^{+0.055}_{-0.07}$	$0.41869^{+0.042}_{-0.056}$	519
t_{FGD}	$0.0067^{+0.0027}_{-0.0023}$	$0.00886^{+0.0025}_{-0.0021}$	1090	$0.21348^{+0.022}_{-0.03}$	$0.24723^{+0.014}_{-0.019}$	850
t_{MMD}	$0.00568^{+0.0037}_{-0.0025}$	$0.00784^{+0.0036}_{-0.0025}$	1925	$0.87964^{+0.19}_{-0.23}$	$1.04846^{+0.14}_{-0.15}$	1413
t_{LLR}	$0.00061^{+0.0004}_{-0.0004}$	$0.0009^{+0.00039}_{-0.0004}$	1652	-	-	-
\mathcal{U} -deformation			Timing			
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
t_{SW}	$0.62405^{+0.086}_{-0.1}$	$0.73669^{+0.072}_{-0.076}$	458	276		
$t_{\overline{KS}}$	$0.69433^{+0.11}_{-0.13}$	$0.8144^{+0.099}_{-0.1}$	337	108		
t_{SKS}	$0.61401^{+0.092}_{-0.12}$	$0.72149^{+0.078}_{-0.092}$	505	398		
t_{FGD}	$0.37006^{+0.038}_{-0.053}$	$0.42858^{+0.025}_{-0.033}$	812	1150		