

CG model with $d = 20$ and $n = m = 5 \cdot 10^4$						
Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.04948^{+0.022}_{-0.021}$	$0.06621^{+0.021}_{-0.02}$	571	$0.02059^{+0.0066}_{-0.0078}$	$0.02732^{+0.0061}_{-0.0065}$	617
$t_{\overline{KS}}$	$0.04811^{+0.022}_{-0.021}$	$0.06605^{+0.021}_{-0.02}$	407	$0.02898^{+0.011}_{-0.012}$	$0.04029^{+0.0097}_{-0.01}$	434
t_{SKS}	$0.04841^{+0.021}_{-0.021}$	$0.06372^{+0.02}_{-0.02}$	655	$0.02623^{+0.0087}_{-0.01}$	$0.03417^{+0.0082}_{-0.0086}$	694
t_{FGD}	$0.05029^{+0.026}_{-0.022}$	$0.06539^{+0.024}_{-0.02}$	1886	$0.01695^{+0.007}_{-0.007}$	$0.02215^{+0.0065}_{-0.0059}$	1994
t_{MMD}	$0.0596^{+0.028}_{-0.02}$	$0.08041^{+0.026}_{-0.02}$	7733	$0.02325^{+0.011}_{-0.0079}$	$0.03109^{+0.01}_{-0.0079}$	8173
t_{NPLM}	$0.02673^{+0.0098}_{-0.011}$	$0.03213^{+0.0087}_{-0.0096}$	5753	$0.00841^{+0.0028}_{-0.0034}$	$0.01019^{+0.0025}_{-0.0028}$	6174
t_{NPLM}	$0.03317^{+0.011}_{-0.014}$	$0.04003^{+0.01}_{-0.012}$	28775	$0.00883^{+0.003}_{-0.0039}$	$0.01084^{+0.0027}_{-0.0031}$	30989
t_{LLR}	$0.00556^{+0.0031}_{-0.003}$	$0.00795^{+0.003}_{-0.003}$	2441	$0.00153^{+0.001}_{-0.00098}$	$0.0022^{+0.00098}_{-0.00099}$	3081
Statistic	$\Sigma_{i \neq j}$ -deformation			pow_+ -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.02783^{+0.0077}_{-0.0099}$	$0.03884^{+0.0064}_{-0.0076}$	1073	$0.0046^{+0.0017}_{-0.0019}$	$0.00614^{+0.0016}_{-0.0017}$	642
$t_{\overline{KS}}$	$1.02831^{+0.015}_{-0.015}$	$1.04211^{+0.0046}_{-0.012}$	1401	$0.00602^{+0.002}_{-0.0024}$	$0.00806^{+0.0019}_{-0.0019}$	459
t_{SKS}	$0.03839^{+0.011}_{-0.014}$	$0.05106^{+0.01}_{-0.012}$	1172	$0.00505^{+0.0017}_{-0.002}$	$0.00646^{+0.0016}_{-0.0017}$	747
t_{FGD}	$0.00483^{+0.0012}_{-0.0014}$	$0.00631^{+0.0011}_{-0.0011}$	3433	$0.00419^{+0.0019}_{-0.0018}$	$0.0054^{+0.0017}_{-0.0015}$	2765
t_{MMD}	$0.03094^{+0.017}_{-0.013}$	$0.04245^{+0.016}_{-0.013}$	8963	$0.00358^{+0.0018}_{-0.0012}$	$0.00483^{+0.0016}_{-0.0013}$	8839
t_{NPLM}	$0.0021^{+0.00059}_{-0.00078}$	$0.0025^{+0.0006}_{-0.0006}$	6959	$0.00247^{+0.00093}_{-0.0011}$	$0.00297^{+0.00087}_{-0.0009}$	6765
t_{NPLM}	$0.0014^{+0.00061}_{-0.0006}$	$0.00186^{+0.00044}_{-0.00056}$	38940	$0.00253^{+0.00096}_{-0.0012}$	$0.0031^{+0.00087}_{-0.00095}$	38805
t_{LLR}	-	-	-	$0.00042^{+0.00025}_{-0.00026}$	$0.00061^{+0.00025}_{-0.00025}$	2919
Statistic	pow_- -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.00455^{+5}_{-0.0017}$	$0.00609^{+5}_{-0.0015}$	587	$0.28641^{+0.047}_{-0.065}$	$0.33654^{+0.037}_{-0.046}$	535
$t_{\overline{KS}}$	$0.00575^{+0.002}_{-0.0022}$	$0.00773^{+0.0018}_{-0.0019}$	461	$0.32182^{+0.055}_{-0.08}$	$0.3832^{+0.045}_{-0.054}$	393
t_{SKS}	$0.00487^{+0.0017}_{-0.0019}$	$0.00632^{+0.0016}_{-0.0017}$	750	$0.28237^{+0.046}_{-0.066}$	$0.32811^{+0.038}_{-0.048}$	612
t_{FGD}	$0.00411^{+0.0017}_{-0.0015}$	$0.0054^{+0.0015}_{-0.0014}$	2758	$0.16992^{+0.02}_{-0.03}$	$0.1944^{+0.014}_{-0.018}$	2132
t_{MMD}	$0.00346^{+0.0019}_{-0.0014}$	$0.00477^{+0.0018}_{-0.0014}$	8990	$0.73852^{+0.086}_{-0.091}$	$0.85602^{+0.075}_{-0.062}$	5790
t_{NPLM}	$0.00274^{+0.00082}_{-0.00096}$	$0.00326^{+0.00074}_{-0.0008}$	6465	$0.10078^{+0.013}_{-0.019}$	$0.11064^{+0.01}_{-0.014}$	4957
t_{NPLM}	$0.00311^{+0.00084}_{-0.0011}$	$0.00368^{+0.00077}_{-0.00087}$	33103	$0.07588^{+0.011}_{-0.018}$	$0.08458^{+0.0093}_{-0.013}$	25314
t_{LLR}	$0.00042^{+0.00025}_{-0.00026}$	$0.0006^{+0.00025}_{-0.00025}$	2930	-	-	-
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
t_{SW}	$0.49513^{+0.079}_{-0.11}$	$0.5818^{+0.063}_{-0.078}$	512	313		
$t_{\overline{KS}}$	$0.55562^{+0.096}_{-0.14}$	$0.65585^{+0.083}_{-0.089}$	378	127		
t_{SKS}	$0.48849^{+0.085}_{-0.11}$	$0.56476^{+0.072}_{-0.079}$	582	480		
t_{FGD}	$0.2926^{+0.036}_{-0.05}$	$0.33697^{+0.025}_{-0.034}$	2042	3821		
t_{MMD}	$1.28521^{+0.15}_{-0.17}$	$1.49004^{+0.11}_{-0.12}$	6502	13843		
t_{NPLM}	$0.17504^{+0.023}_{-0.033}$	$0.19225^{+0.016}_{-0.026}$	4715	10154		
t_{NPLM}	$0.13243^{+0.019}_{-0.034}$	$0.14592^{+0.016}_{-0.022}$	24389	51801		
t_{LLR}	-	-	-	-		