

CG model with $d = 5$ and $n = m = 10^4$

Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.09616^{+0.048}_{-0.044}$	$0.12994^{+0.048}_{-0.043}$	672	$0.03714^{+0.012}_{-0.013}$	$0.05073^{+0.012}_{-0.011}$	506
$t_{\overline{KS}}$	$0.08231^{+0.038}_{-0.038}$	$0.10549^{+0.037}_{-0.036}$	512	$0.06456^{+0.026}_{-0.027}$	$0.08369^{+0.025}_{-0.025}$	587
t_{SKS}	$0.09964^{+0.046}_{-0.043}$	$0.1332^{+0.045}_{-0.043}$	926	$0.05119^{+0.017}_{-0.019}$	$0.06884^{+0.017}_{-0.017}$	1027
t_{FGD}	$0.09501^{+0.057}_{-0.043}$	$0.12754^{+0.053}_{-0.04}$	523	$0.03069^{+0.013}_{-0.011}$	$0.04128^{+0.012}_{-0.01}$	526
t_{MMD}	$0.11968^{+0.074}_{-0.05}$	$0.17104^{+0.069}_{-0.051}$	544	$0.03462^{+0.021}_{-0.015}$	$0.0492^{+0.02}_{-0.014}$	608
t_{LLR}	$0.02932^{+0.02}_{-0.02}$	$0.04099^{+0.02}_{-0.02}$	1069	$0.00622^{+0.0039}_{-0.0038}$	$0.00873^{+0.004}_{-0.0039}$	1402
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}	$0.086^{+0.021}_{-0.026}$	$0.12145^{+0.019}_{-0.021}$	631	$0.00934^{+0.0041}_{-0.004}$	$0.01282^{+0.0041}_{-0.0038}$	538
$t_{\overline{KS}}$	$1.06868^{+0.021}_{-0.032}$	$1.08328^{+0.024}_{-0.026}$	573	$0.01297^{+0.0051}_{-0.0053}$	$0.01644^{+0.0049}_{-0.0049}$	587
t_{SKS}	$0.11627^{+0.033}_{-0.037}$	$0.15706^{+0.031}_{-0.032}$	792	$0.01054^{+0.0041}_{-0.0041}$	$0.01378^{+0.004}_{-0.0038}$	1031
t_{FGD}	$0.02305^{+0.0059}_{-0.0067}$	$0.03144^{+0.0055}_{-0.0055}$	854	$0.00829^{+0.0042}_{-0.0033}$	$0.01111^{+0.004}_{-0.0031}$	550
t_{MMD}	$0.12526^{+0.065}_{-0.05}$	$0.18131^{+0.063}_{-0.048}$	898	$0.00651^{+0.0041}_{-0.0028}$	$0.00925^{+0.0038}_{-0.0028}$	650
t_{LLR}	-	-	-	$0.00249^{+0.0015}_{-0.0015}$	$0.00341^{+0.0015}_{-0.0015}$	1249
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.01009^{+10}_{-0.0039}$	$0.01378^{+10}_{-0.0038}$	490	$0.38044^{+0.058}_{-0.072}$	$0.45299^{+0.053}_{-0.053}$	460
$t_{\overline{KS}}$	$0.01349^{+0.0049}_{-0.0052}$	$0.01681^{+0.0047}_{-0.0047}$	660	$0.31644^{+0.066}_{-0.079}$	$0.37026^{+0.051}_{-0.069}$	587
t_{SKS}	$0.01086^{+0.0041}_{-0.0038}$	$0.01421^{+0.0039}_{-0.0037}$	1042	$0.37535^{+0.063}_{-0.076}$	$0.44166^{+0.055}_{-0.057}$	882
t_{FGD}	$0.00888^{+0.0044}_{-0.0037}$	$0.01176^{+0.0041}_{-0.0033}$	554	$0.28641^{+0.029}_{-0.042}$	$0.32984^{+0.024}_{-0.023}$	447
t_{MMD}	$0.00689^{+0.0044}_{-0.0031}$	$0.01004^{+0.0041}_{-0.0032}$	672	$0.79385^{+0.17}_{-0.17}$	$0.94639^{+0.14}_{-0.12}$	565
t_{LLR}	$0.00214^{+0.0015}_{-0.0015}$	$0.00306^{+0.0015}_{-0.0015}$	1286	-	-	-
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
t_{SW}	$0.65743^{+0.1}_{-0.13}$	$0.78411^{+0.081}_{-0.094}$	446	253		
$t_{\overline{KS}}$	$0.54743^{+0.1}_{-0.13}$	$0.62772^{+0.085}_{-0.11}$	544	29		
t_{SKS}	$0.65034^{+0.1}_{-0.13}$	$0.76279^{+0.093}_{-0.1}$	859	341		
t_{FGD}	$0.4938^{+0.051}_{-0.067}$	$0.57599^{+0.035}_{-0.044}$	422	323		
t_{MMD}	$1.36812^{+0.31}_{-0.28}$	$1.63622^{+0.25}_{-0.2}$	648	207		
t_{LLR}	-	-	-	-		