

**CG model with  $d = 20$  and  $n = m = 2 \cdot 10^4$**

$\mu$ -deformation				$\Sigma_{ii}$ -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
$t_{\overline{KS}}$	<b><math>0.06957^{+0.034}_{-0.032}</math></b>	<b><math>0.09504^{+0.032}_{-0.032}</math></b>	<b>366</b>	$0.04632^{+0.015}_{-0.015}$	$0.06199^{+0.014}_{-0.014}$	<b>387</b>
$t_{SKS}$	$0.0699^{+0.033}_{-0.031}$	$0.09548^{+0.032}_{-0.03}$	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	<b><math>0.0269^{+0.01}_{-0.0088}</math></b>	<b><math>0.03574^{+0.0091}_{-0.0081}</math></b>	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)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{pow+}$	$t$ (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
$t_{\overline{KS}}$	$1.04753^{+0.011}_{-0.016}$	$1.06042^{+0.017}_{-0.011}$	<b>2455</b>	$0.00901^{+0.0033}_{-0.0034}$	$0.01206^{+0.003}_{-0.0032}$	<b>422</b>
$t_{SKS}$	$0.02376^{+0.0074}_{-0.0087}$	$0.0331^{+0.007}_{-0.0075}$	2725	$0.00745^{+0.0027}_{-0.0029}$	$0.0099^{+0.0025}_{-0.0026}$	632
$t_{FGD}$	<b><math>0.00391^{+0.00087}_{-0.001}</math></b>	<b><math>0.00511^{+0.0009}_{-0.00078}</math></b>	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	<b><math>0.00488^{+0.0042}_{-0.0029}</math></b>	<b><math>0.00687^{+0.0039}_{-0.0027}</math></b>	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	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{pow-}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{\mathcal{N}}$	$t$ (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
$t_{\overline{KS}}$	$0.00946^{+0.003}_{-0.0031}$	$0.01227^{+0.0029}_{-0.0028}$	<b>418</b>	$0.40421^{+0.061}_{-0.079}$	$0.47653^{+0.053}_{-0.058}$	<b>353</b>
$t_{SKS}$	$0.00803^{+0.0027}_{-0.0029}$	$0.01046^{+0.0025}_{-0.0026}$	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	<b><math>0.21348^{+0.022}_{-0.03}</math></b>	<b><math>0.24723^{+0.014}_{-0.019}</math></b>	850
$t_{MMD}$	<b><math>0.00568^{+0.0037}_{-0.0025}</math></b>	<b><math>0.00784^{+0.0036}_{-0.0025}</math></b>	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	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{\mathcal{U}}$	$t$ (s)	$t^{\text{null}}$ (s)		
$t_{FGD}$	<b><math>0.37006^{+0.038}_{-0.053}</math></b>	<b><math>0.42858^{+0.025}_{-0.033}</math></b>	812	1150		
$t_{LLR}$	-	-	-	-		
$t_{MMD}$	$1.53597^{+0.32}_{-0.42}$	$1.81389^{+0.26}_{-0.27}$	1386	2284		
$t_{SKS}$	$0.61401^{+0.092}_{-0.12}$	$0.72149^{+0.078}_{-0.092}$	505	398		
$t_{SW}$	$0.62405^{+0.086}_{-0.1}$	$0.73669^{+0.072}_{-0.076}$	458	276		
$t_{\overline{KS}}$	$0.69433^{+0.11}_{-0.13}$	$0.8144^{+0.099}_{-0.1}$	<b>337</b>	<b>108</b>		