$ m CG\ model\ with\ d=20\ and\ n=m=10^5$						
	$\mu$ -deformation			$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\% ext{CL}}$	t (s)
$t_{ m SW}$	$0.03129^{+0.017}_{-0.017}$	$0.04371^{+0.017}_{-0.016}$	639	$0.01426^{+0.005}_{-0.0059}$	$0.01917^{+0.0048}_{-0.0048}$	665
$t_{\overline{ ext{KS}}}$	$  0.03141^{+0.016}_{-0.015}  $	$0.04347^{+0.015}_{-0.015}$	460	$0.01967^{+0.0071}$	$0.02735^{+0.0066}_{-0.007}$	472
$t_{ m SKS}$	$\begin{array}{c c} 0.03135^{+0.016}_{-0.016} \\ \textbf{0.03111}^{+0.021}_{-0.017} \end{array}$	$0.04314^{+0.016}_{-0.015}$	769	$\begin{array}{c} 0.018^{+0.0067}_{-0.0077} \\ 0.018^{+0.0065}_{-0.0075} \\ 0.01186^{+0.0054}_{-0.005} \end{array}$	$0.02411^{+0.0003}$	782
$t_{ m FGD}$	$0.03111^{+0.021}_{-0.017}$	$0.04221_{-0.016}^{+0.019}$	4255	$0.01186^{+0.0054}_{-0.005}$	$0.01569_{-0.0044}^{+0.0048}$	4335
$t_{ m MMD}$	$0.04025^{+0.025}_{-0.010}$	$\begin{array}{c} \textbf{0.04221}^{+0.013}_{-0.016} \\ \textbf{0.05607}^{+0.023}_{-0.018} \end{array}$	9663	$0.01562^{+0.01}_{-0.0074}$	$\begin{array}{c} 0.02411_{-0.0064} \\ 0.01569_{-0.0044}^{+0.0048} \\ 0.02173_{-0.0071}^{+0.0094} \\ 0.00751_{-0.00210}^{+0.0019} \end{array}$	10030
$t_{ m NPLM}$	$-0.01000 \pm 0.0063$	$0.00000\pm0.00009$	16247	$0.00615^{+0.0021}_{-0.0027}$	$0.00751^{+0.0019}_{-0.0021}$	17791
$t_{ m LLR}$	$\begin{array}{c c} 0.01895_{-0.0079} \\ 0.00359_{-0.0024}^{+0.0024} \end{array}$	$0.02309_{-0.0063} \\ 0.00499_{-0.0024}^{+0.0024}$	4610	$\begin{array}{c} -0.005 \\ 0.01562^{+0.01}_{-0.0074} \\ 0.00615^{+0.0021}_{-0.0027} \\ 0.00121^{+0.0007}_{-0.00069} \end{array}$	$0.00751_{-0.0021}^{+0.00069}$ $0.00169_{-0.0007}^{+0.00069}$	5014
$\Sigma_{i\neq j}$ -deformation				$pow_+$ -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.01982^{+0.0057}_{-0.0078}$	$0.02792^{+0.0047}_{-0.0054}$	1111	$0.00297^{+0.0014}_{-0.0015}$	$0.00412^{+0.0013}_{-0.0013}$	704
$t_{\overline{ ext{KS}}}$	$1.0196^{+0.0058}_{-0.0057}$	$1.0239_{-0.0025}^{+0.013}$	1498	$0.00399^{+0.0016}_{-0.0017}$	$0.00538^{+0.0014}_{-0.0015}$	<b>508</b>
$t_{ m SKS}$	$0.02657^{+0.0082}_{-0.01}$	$\begin{array}{c} 0.02132_{-0.0054} \\ 1.0239_{-0.0025}^{+0.013} \\ 0.03653_{-0.0084}^{+0.0075} \end{array}$	1283	$\begin{array}{c} -0.0013 \\ 0.00399 ^{+0.0016}_{-0.0017} \\ 0.00327 ^{+0.0013}_{-0.0015} \end{array}$	$0.00437^{+0.0013}_{-0.0013}$	837
$t_{ m FGD}$	$0.00341^{+0.0008}$	$0.0044^{+0.0008}_{-0.00082}$	4892	$0.00271^{+0.0015}_{-0.0014}$	$0.00361^{+0.0014}_{-0.0011}$	3416
$t_{ m MMD}$	$-0.00100\pm0.014$	$0.03066^{+0.013}_{-0.0099}$	11100	$0.00241^{+0.0014}_{-0.0012}$	$0.00337^{+0.0015}_{-0.0011}$	11029
$t_{ m NPLM}$	$ \begin{array}{c c} 0.02162^{+0.0017}_{-0.0097} \\ 0.0015^{+0.00041}_{-0.0006} \end{array} $	$0.0018^{+0.0004}_{-0.00045}$	19458	$0.00177^{+0.00062}_{-0.00078}$	$0.00216^{+0.00056}_{-0.00062}$	19801
$t_{ m LLR}$	-	=	-	$\begin{array}{c} 0.00177_{-0.00078}^{+0.00078} \\ 0.00029_{-0.00017}^{+0.00017} \end{array}$	$\begin{array}{c} 0.00216^{+0.00056}_{-0.00062} \\ 0.00041^{+0.00017}_{-0.00016} \end{array}$	5378
$pow\deformation$				$\mathcal{N} ext{-deformation}$		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.00332^{+5}_{-0.0012}$	$0.00448^{+5}_{-0.00099}$	636	$0.2383^{+0.041}_{-0.058}$	$0.2828^{+0.032}_{-0.039}$	527
$t_{\overline{ ext{KS}}}$	$0.00427^{+0.0013}_{-0.0014}$	$0.00565^{+0.0013}_{-0.0012}$	$\bf 502$	$0.26557^{+0.046}_{-0.062}$	$0.31516^{+0.036}_{-0.044}$	418
$t_{ m SKS}$	$0.00361^{+0.0011}_{-0.0012}$	$0.0047^{+0.0011}$	826	$0.23289^{+0.042}_{-0.057} \ 0.14094^{+0.018}_{-0.027}$	$0.27403^{+0.034}_{-0.041}$	672
$t_{ m FGD}$	$0.00296^{+0.0012}_{-0.001}$	$0.0039^{+0.0011}_{-0.00093}$	3369	$0.14094^{+0.018}_{-0.027}$	$0.16127^{+0.013}_{-0.016}$	2623
$t_{ m MMD}$	$\begin{array}{c} -0.0014 \\ 0.00361 {+0.0011 \atop -0.0012} \\ 0.00296 {+0.0012 \atop -0.001} \\ \textbf{0.00241} {+0.0016 \atop -0.0011} \\ \end{array}$	$0.0034^{+0.0015}_{-0.0011}$	11032	$0.60915^{+0.1}_{-0.12}$	$0.71813^{+0.08}_{-0.08}$	7611
$t_{ m NPLM}$	$\begin{array}{c} 0.0019^{+0.00058}_{-0.00072} \\ 0.00031^{+0.00016}_{-0.00017} \end{array}$	$0.0001 \pm 0.00051$	19302	$0.08534_{-0.019}^{+0.012}$	$0.09358^{+0.01}_{-0.013}$	20062
$t_{ m LLR}$	$0.00031^{+0.00016}_{-0.00017}$	$0.00231_{-0.00058}^{+0.00016}$ $0.00043_{-0.00017}^{+0.00016}$	5381	-	-	-
$\mathcal{U} ext{-} ext{deformation}$			Timing			
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$t^{\text{null}}$ (s)		
$t_{ m SW}$	$0.41249^{+0.072}_{-0.1}$	$0.49115^{+0.057}_{-0.069}$	515	358		
$t_{\overline{ ext{KS}}}$	$0.45649^{+0.083}$		$\boldsymbol{402}$	224		
$t_{ m SKS}$	$-0.40104\pm0.076$	$0.47569 \pm 0.061$	663	702		
$t_{ m FGD}$	$\mid 0.24366^{+0.031}_{-0.046} \mid$	$0.27881_{-0.027}^{+0.023}$	2511	6325		
$t_{ m MMD}$	$1.06239^{+0.16}_{-0.22}$	$1.24837^{+0.14}_{-0.14}$	8273	16601	_	
$t_{ m NPLM}$	$0.14755^{+0.021}_{-0.031}$	$0.16279_{-0.023}^{+0.016}$	13832	28270		
$t_{ m LLR}$	_	-	-	-		