

**Scaled Particle features with  $n = m = 5 \cdot 10^4$**

$\mu$ -deformation				$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)
$t_{SW}$	$0.01334^{+0.0038}_{-0.0046}$	$0.01815^{+0.0037}_{-0.0029}$	<b>1116</b>	$0.0166^{+0.0059}_{-0.0063}$	$0.02125^{+0.006}_{-0.0034}$	<b>1079</b>
$t_{\overline{KS}}$	<b><math>0.0^{+0.0045}_{-0}</math></b>	<b><math>0.00771^{+0.0022}_{-0.0049}</math></b>	58835	<b><math>0.0^{+0.013}_{-0}</math></b>	$0.01904^{+0.0086}_{-0.011}$	62555
$t_{SKS}$	$0.01275^{+0.0034}_{-0.0043}$	$0.01734^{+0.0036}_{-0.0028}$	18356	$0.02131^{+0.007}_{-0.0073}$	$0.02899^{+0.006}_{-0.0047}$	26542
$t_{FGD}$	$0.01627^{+0.003}_{-0.006}$	$0.02025^{+0.0024}_{-0.0047}$	39057	$0.01469^{+0.0034}_{-0.0057}$	<b><math>0.01805^{+0.0043}_{-0.0051}</math></b>	27175
$t_{MMD}$	$0.01613^{+0.0049}_{-0.0058}$	$0.02141^{+0.0032}_{-0.0035}$	22841	$0.01606^{+0.0074}_{-0.0066}$	$0.02089^{+0.0055}_{-0.0061}$	33730
$\Sigma_{i \neq j}$ -deformation				pow $_{+}$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{pow_{+}}$	$t$ (s)
$t_{SW}$	$0.01393^{+0.0041}_{-0.0047}$	$0.01895^{+0.0039}_{-0.0031}$	<b>1344</b>	$0.01894^{+0.0055}_{-0.0072}$	$0.02425^{+0.0068}_{-0.0039}$	<b>1006</b>
$t_{\overline{KS}}$	$0.01325^{+0.013}_{-0.013}$	$0.03498^{+0.0085}_{-0.014}$	37177	<b><math>0.0^{+0.0066}_{-0}</math></b>	<b><math>0.01141^{+0.0073}_{-0.011}</math></b>	49091
$t_{SKS}$	$0.01569^{+0.0034}_{-0.0053}$	$0.02135^{+0.0044}_{-0.0048}$	36300	$0.03552^{+0.0055}_{-0.013}$	$0.04366^{+0.01}_{-0.0066}$	15487
$t_{FGD}$	<b><math>0.00128^{+0.00037}_{-0.00044}</math></b>	<b><math>0.0017^{+0.00025}_{-0.00037}</math></b>	30741	$0.01534^{+0.0052}_{-0.0062}$	$0.01886^{+0.0045}_{-0.0055}$	24241
$t_{MMD}$	$0.00903^{+0.0039}_{-0.0044}$	$0.01242^{+0.0029}_{-0.0042}$	38971	$0.01896^{+0.0074}_{-0.008}$	$0.02428^{+0.0068}_{-0.0071}$	27198
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)
$t_{SW}$	$0.01909^{+0.0073}_{-0.0077}$	$0.02693^{+0.0061}_{-0.0068}$	<b>1006</b>	$0.10868^{+0.02}_{-0.017}$	$0.1277^{+0.011}_{-0.022}$	<b>886</b>
$t_{\overline{KS}}$	<b><math>0.0^{+0.0095}_{-0}</math></b>	<b><math>0.01323^{+0.0069}_{-0.0085}</math></b>	45323	$0.0656^{+0.016}_{-0.049}$	$0.08707^{+0.013}_{-0.019}$	22186
$t_{SKS}$	$0.0356^{+0.0093}_{-0.013}$	$0.04726^{+0.007}_{-0.011}$	22261	$0.10733^{+0.022}_{-0.017}$	$0.13357^{+0.016}_{-0.026}$	24344
$t_{FGD}$	$0.01543^{+0.007}_{-0.0065}$	$0.01852^{+0.0068}_{-0.0042}$	24968	<b><math>0.04853^{+0.0071}_{-0.0075}</math></b>	<b><math>0.05702^{+0.0051}_{-0.006}</math></b>	24273
$t_{MMD}$	$0.01859^{+0.0085}_{-0.0081}$	$0.02501^{+0.0083}_{-0.0064}$	27960	$0.26953^{+0.035}_{-0.052}$	$0.30333^{+0.029}_{-0.011}$	19782
$\mathcal{U}$ -deformation				Timing		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{\mathcal{U}}$	$t$ (s)	$t^{\text{null}}$ (s)		
$t_{SW}$	$0.19116^{+0.035}_{-0.03}$	$0.22462^{+0.02}_{-0.039}$	<b>774</b>	<b>133</b>		
$t_{\overline{KS}}$	$0.10693^{+0.022}_{-0.086}$	$0.14193^{+0.021}_{-0.019}$	10646	1972		
$t_{SKS}$	$0.19116^{+0.035}_{-0.03}$	$0.22462^{+0.02}_{-0.039}$	16154	4379		
$t_{FGD}$	<b><math>0.08969^{+0.006}_{-0.016}</math></b>	<b><math>0.10215^{+0.0042}_{-0.016}</math></b>	21825	6689		
$t_{MMD}$	$0.48398^{+0.032}_{-0.088}$	$0.5512^{+0.022}_{-0.058}$	14676	3605		
$t_{LLR}$	-	-	-	-		