

Scaled Particle features with $n = m = 2 \cdot 10^4$						
Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.02051^{+0.0059}_{-0.0073}$	$0.02921^{+0.0058}_{-0.003}$	1482	$0.02531^{+0.0089}_{-0.01}$	$0.03339^{+0.01}_{-0.0057}$	1030
$t_{\overline{KS}}$	$0.00993^{+0.0052}_{-0.0078}$	$0.01668^{+0.0052}_{-0.0032}$	1875	$0.02465^{+0.016}_{-0.019}$	$0.03767^{+0.017}_{-0.0092}$	2464
t_{SKS}	$0.01919^{+0.0052}_{-0.0065}$	$0.02798^{+0.0013}_{-0.0067}$	3630	$0.03319^{+0.0078}_{-0.013}$	$0.04406^{+0.0065}_{-0.014}$	4096
t_{FGD}	$0.02609^{+0.0054}_{-0.011}$	$0.03056^{+0.0057}_{-0.0049}$	4986	$0.02305^{+0.0077}_{-0.0093}$	$0.02833^{+0.0068}_{-0.0078}$	6023
t_{MMD}	$0.028^{+0.0042}_{-0.011}$	$0.03484^{+0.0041}_{-0.0056}$	3875	$0.02671^{+0.011}_{-0.011}$	$0.03206^{+0.012}_{-0.0088}$	4796
t_{NPLM}	$0.00245^{+0.00065}_{-0.00083}$	$0.00294^{+0.0006}_{-0.00061}$	43949	$0.00711^{+0.0022}_{-0.0028}$	$0.00866^{+0.0017}_{-0.0019}$	41263
t_{NPLM}	$0.00232^{+0.00065}_{-0.00078}$	$0.00289^{+0.00052}_{-0.00066}$	34958	$0.01154^{+0.0032}_{-0.0045}$	$0.0142^{+0.0027}_{-0.0031}$	31575
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}	$0.05216^{+0.0084}_{-0.021}$	$0.06924^{+0.01}_{-0.012}$	2288	$0.03068^{+0.01}_{-0.014}$	$0.03771^{+0.009}_{-0.0064}$	968
$t_{\overline{KS}}$	$1.03785^{+0.009}_{-0.024}$	$1.04608^{+0.0082}_{-0.016}$	2734	$0.01587^{+0.0085}_{-0.013}$	$0.02425^{+0.011}_{-0.0046}$	3768
t_{SKS}	$0.06232^{+0.014}_{-0.028}$	$0.0766^{+0.018}_{-0.0079}$	7333	$0.04819^{+0.016}_{-0.017}$	$0.06357^{+0.02}_{-0.01}$	5176
t_{FGD}	$0.00395^{+0.0012}_{-0.0014}$	$0.00521^{+0.0016}_{-0.0012}$	10771	$0.0243^{+0.0079}_{-0.0098}$	$0.02987^{+0.0072}_{-0.0082}$	4923
t_{MMD}	$0.03602^{+0.013}_{-0.015}$	$0.04256^{+0.014}_{-0.012}$	41440	$0.03037^{+0.011}_{-0.012}$	$0.03734^{+0.0089}_{-0.011}$	5925
t_{NPLM}	$0.0161^{+0.0043}_{-0.0063}$	$0.02015^{+0.0035}_{-0.0042}$	32895	$0.02773^{+0.01}_{-0.012}$	$0.0342^{+0.011}_{-0.0099}$	31569
t_{NPLM}	$0.01727^{+0.0042}_{-0.0083}$	$0.02068^{+0.0059}_{-0.0045}$	31422	$0.02585^{+0.0094}_{-0.011}$	$0.03368^{+0.0081}_{-0.012}$	29617
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.03574^{+0.0092}_{-0.016}$	$0.04394^{+0.011}_{-0.011}$	973	$0.13338^{+0.031}_{-0.023}$	$0.15296^{+0.033}_{-0.0054}$	787
$t_{\overline{KS}}$	$0.01675^{+0.0096}_{-0.013}$	$0.0256^{+0.011}_{-0.0076}$	4374	$0.09466^{+0.019}_{-0.023}$	$0.10855^{+0.023}_{-0.021}$	3825
t_{SKS}	$0.05724^{+0.011}_{-0.025}$	$0.07036^{+0.017}_{-0.0072}$	5169	$0.13338^{+0.031}_{-0.023}$	$0.15296^{+0.033}_{-0.016}$	4479
t_{FGD}	$0.02527^{+0.0089}_{-0.011}$	$0.03169^{+0.0083}_{-0.0076}$	4913	$0.06571^{+0.0056}_{-0.012}$	$0.07484^{+0.003}_{-0.011}$	4537
t_{MMD}	$0.03366^{+0.01}_{-0.015}$	$0.04192^{+0.011}_{-0.01}$	6008	$0.35498^{+0.028}_{-0.049}$	$0.40428^{+0.016}_{-0.043}$	4996
t_{NPLM}	$0.0566^{+0.011}_{-0.014}$	$0.06276^{+0.011}_{-0.0081}$	24114	$0.11454^{+0.019}_{-0.027}$	$0.13012^{+0.013}_{-0.017}$	20278
t_{NPLM}	$0.05875^{+0.0094}_{-0.014}$	$0.06514^{+0.011}_{-0.0092}$	26972	$0.11419^{+0.019}_{-0.041}$	$0.13021^{+0.017}_{-0.022}$	25934
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
t_{SW}	$0.22562^{+0.048}_{-0.041}$	$0.2808^{+0.033}_{-0.036}$	765	269		
$t_{\overline{KS}}$	$0.1547^{+0.025}_{-0.043}$	$0.19254^{+0.023}_{-0.046}$	4034	353		
t_{SKS}	$0.22562^{+0.048}_{-0.041}$	$0.2808^{+0.033}_{-0.054}$	4777	857		
t_{FGD}	$0.11465^{+0.0084}_{-0.027}$	$0.11995^{+0.016}_{-0.004}$	4174	1336		
t_{MMD}	$0.61572^{+0.041}_{-0.1}$	$0.70123^{+0.029}_{-0.081}$	2536	862		
t_{NPLM}	$0.19868^{+0.033}_{-0.047}$	$0.2244^{+0.021}_{-0.029}$	19158	4583		
t_{NPLM}	$0.19517^{+0.036}_{-0.068}$	$0.22609^{+0.026}_{-0.038}$	23624	6158		