

Scaled Particle features with $n = m = 5 \cdot 10^4$						
Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.01334^{+0.0038}_{-0.0046}$	$0.01815^{+0.0037}_{-0.0029}$	1116	$0.0166^{+0.0059}_{-0.0063}$	$0.02125^{+0.006}_{-0.0034}$	1079
$t_{\overline{KS}}$	$0.0^{+0.0045}_{-0}$	$0.00771^{+0.0022}_{-0.0049}$	58835	$0.0^{+0.013}_{-0}$	$0.01904^{+0.0086}_{-0.011}$	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	$0.01469^{+0.0034}_{-0.0057}$	$0.01805^{+0.0043}_{-0.0051}$	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
t_{NPLM}	$0.00152^{+0.00041}_{-0.00068}$	$0.00167^{+0.00045}_{-0.00046}$	64992	$0.00426^{+0.0014}_{-0.0017}$	$0.00471^{+0.00092}_{-0.0011}$	27852
t_{NPLM}	$0.00147^{+0.00046}_{-0.00056}$	$0.00182^{+0.00033}_{-0.00038}$	45154	$0.00762^{+0.0025}_{-0.0025}$	$0.00939^{+0.0022}_{-0.002}$	38293
t_{NPLM}	$0.00167^{+0.00053}_{-0.0007}$	$0.002^{+0.0004}_{-0.00051}$	121700	$0.00349^{+0.0013}_{-0.0016}$	$0.00429^{+0.00099}_{-0.0012}$	120179
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}	$0.03128^{+0.0068}_{-0.011}$	$0.04152^{+0.0061}_{-0.0067}$	1424	$0.01894^{+0.0055}_{-0.0072}$	$0.02425^{+0.0068}_{-0.0039}$	1006
$t_{\overline{KS}}$	$0.99134^{+0.016}_{-0.0078}$	$1.01532^{+0.008}_{-0.004}$	11987	$0.0^{+0.0066}_{-0}$	$0.01141^{+0.0073}_{-0.011}$	49091
t_{SKS}	$0.03809^{+0.011}_{-0.013}$	$0.0515^{+0.011}_{-0.0083}$	27313	$0.03552^{+0.0055}_{-0.013}$	$0.04366^{+0.01}_{-0.0066}$	15487
t_{FGD}	$0.0026^{+0.00076}_{-0.00089}$	$0.00345^{+0.00052}_{-0.00076}$	33338	$0.01534^{+0.0052}_{-0.0062}$	$0.01886^{+0.0045}_{-0.0055}$	24241
t_{MMD}	$0.01919^{+0.011}_{-0.0079}$	$0.02614^{+0.0089}_{-0.0065}$	20604	$0.01896^{+0.0074}_{-0.008}$	$0.02428^{+0.0068}_{-0.0071}$	27198
t_{NPLM}	$0.00906^{+0.0021}_{-0.0035}$	$0.01018^{+0.0019}_{-0.0023}$	54091	$0.01792^{+0.0064}_{-0.0086}$	$0.02055^{+0.0056}_{-0.0056}$	37834
t_{NPLM}	$0.01213^{+0.0038}_{-0.0045}$	$0.01536^{+0.0024}_{-0.0033}$	36876	$0.01956^{+0.0048}_{-0.0088}$	$0.02471^{+0.005}_{-0.0069}$	35571
t_{NPLM}	$0.00326^{+0.0014}_{-0.0015}$	$0.00404^{+0.0014}_{-0.0011}$	117906	$0.01074^{+0.0053}_{-0.0061}$	$0.01474^{+0.005}_{-0.005}$	116436
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.01909^{+0.0073}_{-0.0077}$	$0.02693^{+0.0061}_{-0.0068}$	1006	$0.10868^{+0.02}_{-0.017}$	$0.1277^{+0.011}_{-0.022}$	886
$t_{\overline{KS}}$	$0.0^{+0.0095}_{-0}$	$0.01323^{+0.0069}_{-0.0085}$	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	$0.04853^{+0.0071}_{-0.0075}$	$0.05702^{+0.0051}_{-0.006}$	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
t_{NPLM}	$0.03192^{+0.0075}_{-0.0064}$	$0.03387^{+0.0064}_{-0.007}$	29245	$0.08993^{+0.012}_{-0.016}$	$0.098^{+0.0071}_{-0.012}$	27364
t_{NPLM}	$0.03218^{+0.0063}_{-0.0089}$	$0.03765^{+0.0051}_{-0.0066}$	33567	$0.09864^{+0.015}_{-0.023}$	$0.11287^{+0.0091}_{-0.015}$	30105
t_{NPLM}	$0.05573^{+0.0051}_{-0.0076}$	$0.05897^{+0.0062}_{-0.0053}$	86377	$0.04549^{+0.0075}_{-0.012}$	$0.05088^{+0.0065}_{-0.0085}$	91294
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t_{null} (s)		
t_{SW}	$0.19116^{+0.035}_{-0.03}$	$0.22462^{+0.02}_{-0.039}$	774	133		
$t_{\overline{KS}}$	$0.10693^{+0.022}_{-0.086}$	$0.14193^{+0.021}_{-0.019}$	10646	1972		
t_{SKS}	$0.19116^{+0.035}_{-0.03}$	$0.22462^{+0.02}_{-0.039}$	16154	4379		
t_{FGD}	$0.08969^{+0.006}_{-0.016}$	$0.10215^{+0.0042}_{-0.016}$	21825	6689		
t_{MMD}	$0.48398^{+0.032}_{-0.088}$	$0.5512^{+0.022}_{-0.058}$	14676	3605		
t_{NPLM}	$0.15699^{+0.019}_{-0.034}$	$0.1632^{+0.02}_{-0.02}$	27308	4569		
t_{NPLM}	$0.16951^{+0.027}_{-0.038}$	$0.19396^{+0.016}_{-0.027}$	29804	7280		
t_{NPLM}	$0.07922^{+0.015}_{-0.021}$	$0.08772^{+0.01}_{-0.015}$	88713	18775		