

Scaled Particle features with $n = m = 10^4$						
Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.03001^{+0.0061}_{-0.012}$	$0.03983^{+0.0059}_{-0.0068}$	636	$0.03556^{+0.013}_{-0.014}$	$0.04838^{+0.01}_{-0.012}$	663
$t_{\overline{KS}}$	$0.01913^{+0.0053}_{-0.0097}$	$0.02873^{+0.0044}_{-0.0066}$	772	$0.04819^{+0.016}_{-0.026}$	$0.06797^{+0.015}_{-0.016}$	871
t_{SKS}	$0.02745^{+0.0048}_{-0.011}$	$0.03644^{+0.0054}_{-0.0062}$	1583	$0.04382^{+0.021}_{-0.014}$	$0.0658^{+0.01}_{-0.016}$	1772
t_{FGD}	$0.03709^{+0.0078}_{-0.013}$	$0.04616^{+0.0054}_{-0.0098}$	2093	$0.03145^{+0.0096}_{-0.013}$	$0.0415^{+0.013}_{-0.0099}$	2163
t_{MMD}	$0.03985^{+0.0061}_{-0.016}$	$0.04959^{+0.0059}_{-0.008}$	1591	$0.03486^{+0.015}_{-0.014}$	$0.04702^{+0.0095}_{-0.011}$	2055
t_{NPLM}	$0.00341^{+0.0011}_{-0.0012}$	$0.00398^{+0.00099}_{-0.0008}$	5719	$0.0132^{+0.0039}_{-0.0043}$	$0.0158^{+0.0034}_{-0.0034}$	4863
t_{NPLM}	$0.00344^{+0.00097}_{-0.001}$	$0.00407^{+0.00084}_{-0.0009}$	32427	$0.0163^{+0.0048}_{-0.0065}$	$0.01975^{+0.0043}_{-0.0043}$	33143
t_{NPLM}	$0.00376^{+0.00095}_{-0.0012}$	$0.00442^{+0.00092}_{-0.00092}$	88275	$0.00773^{+0.002}_{-0.0043}$	$0.0092^{+0.002}_{-0.0021}$	91699
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}	$0.06612^{+0.024}_{-0.02}$	$0.08996^{+0.019}_{-0.014}$	606	$0.04091^{+0.016}_{-0.016}$	$0.0543^{+0.008}_{-0.013}$	539
$t_{\overline{KS}}$	$1.03125^{+0.014}_{-0.011}$	$1.05323^{+0.0083}_{-0.016}$	524	$0.03145^{+0.0096}_{-0.017}$	$0.04437^{+0.01}_{-0.01}$	1171
t_{SKS}	$0.08023^{+0.025}_{-0.029}$	$0.11316^{+0.026}_{-0.019}$	1725	$0.06612^{+0.024}_{-0.023}$	$0.09525^{+0.013}_{-0.016}$	2062
t_{FGD}	$0.00595^{+0.0021}_{-0.002}$	$0.00773^{+0.002}_{-0.0016}$	2951	$0.03323^{+0.015}_{-0.014}$	$0.04254^{+0.012}_{-0.01}$	2277
t_{MMD}	$0.04659^{+0.021}_{-0.019}$	$0.06147^{+0.019}_{-0.02}$	1637	$0.04071^{+0.016}_{-0.016}$	$0.0537^{+0.017}_{-0.013}$	2231
t_{NPLM}	$0.02919^{+0.0098}_{-0.014}$	$0.03599^{+0.0066}_{-0.0083}$	4605	$0.04102^{+0.015}_{-0.019}$	$0.05014^{+0.016}_{-0.011}$	4282
t_{NPLM}	$0.02168^{+0.0095}_{-0.0079}$	$0.02895^{+0.0058}_{-0.0079}$	31494	$0.03359^{+0.011}_{-0.015}$	$0.04257^{+0.013}_{-0.012}$	30343
t_{NPLM}	$0.00935^{+0.0043}_{-0.0045}$	$0.0132^{+0.0037}_{-0.0063}$	84893	$0.02109^{+0.0081}_{-0.011}$	$0.02773^{+0.0094}_{-0.0088}$	88843
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.04382^{+0.021}_{-0.017}$	$0.0618^{+0.014}_{-0.018}$	689	$0.16911^{+0.026}_{-0.035}$	$0.18687^{+0.03}_{-0.02}$	397
$t_{\overline{KS}}$	$0.03145^{+0.0096}_{-0.018}$	$0.0415^{+0.013}_{-0.0096}$	1316	$0.11951^{+0.025}_{-0.034}$	$0.14874^{+0.018}_{-0.02}$	1196
t_{SKS}	$0.07149^{+0.026}_{-0.026}$	$0.10084^{+0.023}_{-0.017}$	2143	$0.15558^{+0.04}_{-0.029}$	$0.19363^{+0.023}_{-0.025}$	1868
t_{FGD}	$0.03556^{+0.013}_{-0.012}$	$0.04553^{+0.013}_{-0.013}$	2220	$0.07893^{+0.011}_{-0.015}$	$0.0886^{+0.012}_{-0.0093}$	1870
t_{MMD}	$0.04497^{+0.023}_{-0.018}$	$0.05933^{+0.018}_{-0.014}$	2247	$0.41065^{+0.042}_{-0.05}$	$0.47533^{+0.05}_{-0.043}$	1844
t_{NPLM}	$0.07771^{+0.014}_{-0.017}$	$0.08785^{+0.014}_{-0.014}$	4598	$0.1557^{+0.023}_{-0.046}$	$0.17567^{+0.019}_{-0.028}$	3816
t_{NPLM}	$0.09887^{+0.016}_{-0.018}$	$0.11057^{+0.014}_{-0.016}$	25423	$0.12814^{+0.022}_{-0.037}$	$0.14572^{+0.019}_{-0.024}$	26043
t_{NPLM}	$0.17345^{+0.012}_{-0.016}$	$0.18108^{+0.011}_{-0.011}$	62317	$0.05764^{+0.01}_{-0.017}$	$0.06644^{+0.0083}_{-0.013}$	77062
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
t_{SW}	$0.28696^{+0.041}_{-0.059}$	$0.31709^{+0.05}_{-0.033}$	373	139		
$t_{\overline{KS}}$	$0.1977^{+0.029}_{-0.055}$	$0.24605^{+0.029}_{-0.032}$	1238	173		
t_{SKS}	$0.28696^{+0.041}_{-0.066}$	$0.33718^{+0.03}_{-0.043}$	1817	402		
t_{FGD}	$0.13593^{+0.016}_{-0.025}$	$0.15378^{+0.02}_{-0.016}$	1874	651		
t_{MMD}	$0.69962^{+0.082}_{-0.086}$	$0.8098^{+0.086}_{-0.074}$	1768	368		
t_{NPLM}	$0.2653^{+0.044}_{-0.077}$	$0.30273^{+0.035}_{-0.053}$	3472	684		
t_{NPLM}	$0.22071^{+0.038}_{-0.065}$	$0.25042^{+0.028}_{-0.041}$	24517	6113		
t_{NPLM}	$0.09943^{+0.018}_{-0.028}$	$0.11395^{+0.014}_{-0.02}$	71648	15050		