

**Scaled Particle features with  $n = m = 2 \cdot 10^4$**

$\mu$ -deformation				$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)
$t_{SW}$	$0.02051^{+0.0059}_{-0.0073}$	$0.02921^{+0.0058}_{-0.003}$	<b>1482</b>	$0.02531^{+0.0089}_{-0.01}$	$0.03339^{+0.01}_{-0.0057}$	<b>1030</b>
$t_{\overline{KS}}$	<b><math>0.00993^{+0.0052}_{-0.0078}</math></b>	<b><math>0.01668^{+0.0052}_{-0.0032}</math></b>	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	<b><math>0.02305^{+0.0077}_{-0.0093}</math></b>	<b><math>0.02833^{+0.0068}_{-0.0078}</math></b>	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
$\Sigma_{i \neq j}$ -deformation				pow $_{+}$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{pow_{+}}$	$t$ (s)
$t_{SW}$	$0.05216^{+0.0084}_{-0.021}$	$0.06924^{+0.01}_{-0.012}$	<b>2288</b>	$0.03068^{+0.01}_{-0.014}$	$0.03771^{+0.009}_{-0.0064}$	<b>968</b>
$t_{\overline{KS}}$	$1.03785^{+0.009}_{-0.024}$	$1.04608^{+0.0082}_{-0.016}$	2734	<b><math>0.01587^{+0.0085}_{-0.013}</math></b>	<b><math>0.02425^{+0.011}_{-0.0046}</math></b>	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
$t_{FGD}$	<b><math>0.00395^{+0.0012}_{-0.0014}</math></b>	<b><math>0.00521^{+0.0016}_{-0.0012}</math></b>	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
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)
$t_{SW}$	$0.03574^{+0.0092}_{-0.016}$	$0.04394^{+0.011}_{-0.011}$	<b>973</b>	$0.13338^{+0.031}_{-0.023}$	$0.15296^{+0.033}_{-0.0054}$	<b>787</b>
$t_{\overline{KS}}$	<b><math>0.01675^{+0.0096}_{-0.013}</math></b>	<b><math>0.0256^{+0.011}_{-0.0076}</math></b>	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	<b><math>0.06571^{+0.0056}_{-0.012}</math></b>	<b><math>0.07484^{+0.003}_{-0.011}</math></b>	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
$\mathcal{U}$ -deformation				Timing		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{\mathcal{U}}$	$t$ (s)	$t^{\text{null}}$ (s)		
$t_{FGD}$	<b><math>0.11465^{+0.0084}_{-0.027}</math></b>	<b><math>0.11995^{+0.016}_{-0.004}</math></b>	4174	1336		
$t_{LLR}$	-	-	-	-		
$t_{MMD}$	$0.61572^{+0.041}_{-0.1}$	$0.70123^{+0.029}_{-0.081}$	2536	862		
$t_{SKS}$	$0.22562^{+0.048}_{-0.041}$	$0.2808^{+0.033}_{-0.054}$	4777	857		
$t_{SW}$	$0.22562^{+0.048}_{-0.041}$	$0.2808^{+0.033}_{-0.036}$	<b>765</b>	<b>269</b>		
$t_{\overline{KS}}$	$0.1547^{+0.025}_{-0.043}$	$0.19254^{+0.023}_{-0.046}$	4034	353		