

**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)
$t_{SW}$	$0.02633^{+0.0098}_{-0.013}$	$0.03714^{+0.0084}_{-0.0097}$	<b>849</b>	$0.02913^{+0.012}_{-0.0079}$	$0.04108^{+0.0093}_{-0.011}$	<b>824</b>
$t_{\overline{KS}}$	<b><math>0.0^{+0.0045}_{-0}</math></b>	<b><math>0.00771^{+0.0022}_{-0.0068}</math></b>	49525	<b><math>0.0^{+0.013}_{-0}</math></b>	<b><math>0.01904^{+0.0086}_{-0.011}</math></b>	55017
$t_{SKS}$	$0.01592^{+0.0046}_{-0.0061}$	$0.02334^{+0.0058}_{-0.0059}$	17572	$0.02735^{+0.0049}_{-0.01}$	$0.03362^{+0.0081}_{-0.0071}$	24987
$t_{FGD}$	$0.04749^{+0.012}_{-0.024}$	$0.06462^{+0.013}_{-0.013}$	30820	$0.04004^{+0.017}_{-0.012}$	$0.0556^{+0.018}_{-0.016}$	25551
$t_{MMD}$	$0.1396^{+0.1}_{-0.065}$	$0.21274^{+0.071}_{-0.065}$	18527	$0.06988^{+0.048}_{-0.031}$	$0.0986^{+0.037}_{-0.036}$	33217
$\Sigma_{i \neq j}$ -deformation				pow $_+$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{pow+}$	$t$ (s)
$t_{SW}$	$0.04883^{+0.012}_{-0.015}$	$0.06979^{+0.0097}_{-0.016}$	<b>1966</b>	$0.02745^{+0.011}_{-0.0075}$	$0.03872^{+0.0088}_{-0.011}$	<b>806</b>
$t_{\overline{KS}}$	$0.99933^{+0.0085}_{-0.014}$	$1.01732^{+0.006}_{-0.0079}$	11225	<b><math>0.0^{+0.0066}_{-0}</math></b>	<b><math>0.01141^{+0.0073}_{-0.011}</math></b>	46010
$t_{SKS}$	$0.04267^{+0.018}_{-0.012}$	$0.06018^{+0.014}_{-0.013}$	29568	$0.03594^{+0.021}_{-0.016}$	$0.05069^{+0.011}_{-0.014}$	24821
$t_{FGD}$	<b><math>0.02641^{+0.0058}_{-0.012}</math></b>	<b><math>0.03966^{+0.006}_{-0.0079}</math></b>	28408	$0.02459^{+0.013}_{-0.012}$	$0.03501^{+0.013}_{-0.012}$	25798
$t_{MMD}$	$0.25965^{+0.068}_{-0.086}$	$0.35327^{+0.073}_{-0.056}$	16061	$0.02054^{+0.014}_{-0.0071}$	$0.02657^{+0.013}_{-0.0091}$	26195
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)
$t_{SW}$	$0.02745^{+0.011}_{-0.014}$	$0.03872^{+0.0088}_{-0.01}$	<b>809</b>	$0.10733^{+0.022}_{-0.026}$	$0.13357^{+0.016}_{-0.016}$	<b>691</b>
$t_{\overline{KS}}$	<b><math>0.0^{+0.0095}_{-0}</math></b>	<b><math>0.01323^{+0.0069}_{-0.0085}</math></b>	45685	<b><math>0.0656^{+0.016}_{-0.053}</math></b>	<b><math>0.08707^{+0.013}_{-0.016}</math></b>	7484
$t_{SKS}$	$0.03777^{+0.015}_{-0.017}$	$0.04837^{+0.014}_{-0.015}$	15966	$0.08456^{+0.013}_{-0.013}$	$0.09935^{+0.0089}_{-0.01}$	18276
$t_{FGD}$	$0.02241^{+0.019}_{-0.01}$	$0.0353^{+0.019}_{-0.011}$	26549	$0.14608^{+0.034}_{-0.038}$	$0.1758^{+0.023}_{-0.021}$	23330
$t_{MMD}$	$0.02077^{+0.017}_{-0.01}$	$0.02939^{+0.016}_{-0.0089}$	20263	$0.33827^{+0.088}_{-0.089}$	$0.37964^{+0.091}_{-0.073}$	19908
$\mathcal{U}$ -deformation				Timing		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{\mathcal{U}}$	$t$ (s)	$t^{\text{null}}$ (s)		
$t_{FGD}$	$0.25168^{+0.053}_{-0.065}$	$0.30289^{+0.04}_{-0.036}$	23243	7351		
$t_{LLR}$	-	-	-	-		
$t_{MMD}$	$0.58039^{+0.17}_{-0.15}$	$0.6876^{+0.14}_{-0.14}$	25557	3880		
$t_{SKS}$	$0.14453^{+0.02}_{-0.028}$	$0.17795^{+0.0057}_{-0.023}$	17723	4818		
$t_{SW}$	$0.1889^{+0.038}_{-0.046}$	$0.2351^{+0.028}_{-0.04}$	<b>625</b>	<b>150</b>		
$t_{\overline{KS}}$	<b><math>0.10693^{+0.022}_{-0.086}</math></b>	<b><math>0.14193^{+0.021}_{-0.019}</math></b>	13565	2126		