MoG model with $d = 20$, $q = 5$, and $n = m = 2 \cdot 10^4$

μ-deformation | Σ_{ii}-deformation

Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.0705^{+0.029}_{-0.03}$	$0.09728^{+0.028}_{-0.027}$	**2879**	$0.02552^{+0.0073}_{-0.0093}$	$0.03528^{+0.0065}_{-0.0072}$	**3063**
$t_{\overline{\text{KS}}}$	$\mathbf{0.00723^{+0.002}_{-0.0027}}$	$\mathbf{0.01001^{+0.0017}_{-0.0021}}$	3020	$\mathbf{0.00268^{+0.00078}_{-0.001}}$	$\mathbf{0.00381^{+0.00066}_{-0.0008}}$	3153
t_{SKS}	$0.05224^{+0.019}_{-0.021}$	$0.0723^{+0.017}_{-0.018}$	2976	$0.02037^{+0.0044}_{-0.0062}$	$0.02765^{+0.0037}_{-0.0043}$	3092
t_{FGD}	$0.08351^{+0.042}_{-0.035}$	$0.11456^{+0.039}_{-0.032}$	3069	$0.02984^{+0.0081}_{-0.0089}$	$0.04052^{+0.0071}_{-0.0069}$	3280
t_{MMD}	$0.06823^{+0.033}_{-0.03}$	$0.09628^{+0.029}_{-0.026}$	3967	$0.01531^{+0.0078}_{-0.0065}$	$0.02118^{+0.0073}_{-0.0059}$	4361
t_{LLR}	$0.00035^{+0.0002}_{-0.0002}$	$0.0005^{+0.0002}_{-0.00021}$	4803	$0.00011^{+7e-05}_{-6e-05}$	$0.00016^{+7e-05}_{-7e-05}$	6129

$\Sigma_{i \neq j}$-deformation | pow$_+$-deformation

Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.03284^{+0.0083}_{-0.012}$	$0.0452^{+0.0072}_{-0.0081}$	**3383**	$0.00885^{+0.0026}_{-0.0032}$	$0.01229^{+0.0023}_{-0.0026}$	3289
$t_{\overline{\text{KS}}}$	$1.00292^{+0.00074}_{-0.002}$	$1.00384^{+0.00031}_{-0.0011}$	3763	$\mathbf{0.00063^{+0.00022}_{-0.00027}}$	$\mathbf{0.00092^{+0.0002}_{-0.00023}}$	3366
t_{SKS}	$0.03491^{+0.011}_{-0.013}$	$0.04771^{+0.009}_{-0.01}$	3492	$0.00669^{+0.0014}_{-0.0019}$	$0.00899^{+0.001}_{-0.0013}$	**3252**
t_{FGD}	$\mathbf{0.0086^{+0.002}_{-0.0024}}$	$\mathbf{0.01178^{+0.0016}_{-0.0018}}$	4984	$0.01094^{+0.0026}_{-0.0032}$	$0.01482^{+0.0021}_{-0.0023}$	3782
t_{MMD}	$0.02632^{+0.013}_{-0.012}$	$0.03677^{+0.012}_{-0.01}$	4795	$0.00543^{+0.0025}_{-0.0022}$	$0.00756^{+0.0022}_{-0.0019}$	4416
t_{LLR}	-	-	-	$2e-05^{+2e-05}_{-1e-05}$	$3e-05^{+2e-05}_{-1e-05}$	5340

pow$_-$-deformation | $\mathcal{N}$-deformation

Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.00925^{+5}_{-0.0034}$	$0.01271^{+5}_{-0.0027}$	**2942**	$0.23992^{+0.03}_{-0.05}$	$0.28403^{+0.022}_{-0.031}$	**2619**
$t_{\overline{\text{KS}}}$	$\mathbf{0.00063^{+0.00022}_{-0.00027}}$	$\mathbf{0.00092^{+0.00019}_{-0.00023}}$	3365	$\mathbf{0.01024^{+0.003}_{-0.0035}}$	$\mathbf{0.01397^{+0.003}_{-0.0031}}$	3009
t_{SKS}	$0.0069^{+0.0011}_{-0.002}$	$0.00915^{+0.0011}_{-0.0014}$	3261	$0.19595^{+0.03}_{-0.043}$	$0.2337^{+0.024}_{-0.03}$	2760
t_{FGD}	$0.01118^{+0.0027}_{-0.0032}$	$0.01522^{+0.0022}_{-0.0024}$	3767	$0.22616^{+0.025}_{-0.035}$	$0.26573^{+0.017}_{-0.02}$	3056
t_{MMD}	$0.0054^{+0.0026}_{-0.0024}$	$0.00762^{+0.0024}_{-0.0021}$	4486	$0.5492^{+0.07}_{-0.098}$	$0.65017^{+0.049}_{-0.055}$	3135
t_{LLR}	$3e-05^{+1e-05}_{-2e-05}$	$4e-05^{+1e-05}_{-2e-05}$	5271	-	-	-

$\mathcal{U}$-deformation | Timing

Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)
t_{SW}	$0.414^{+0.054}_{-0.084}$	$0.49011^{+0.037}_{-0.054}$	**2594**	302
$t_{\overline{\text{KS}}}$	$\mathbf{0.01605^{+0.0043}_{-0.0049}}$	$\mathbf{0.02144^{+0.0043}_{-0.0046}}$	2920	**120**
t_{SKS}	$0.33963^{+0.052}_{-0.08}$	$0.4023^{+0.04}_{-0.052}$	2714	397
t_{FGD}	$0.39292^{+0.043}_{-0.06}$	$0.46165^{+0.029}_{-0.038}$	2912	1022
t_{MMD}	$0.95249^{+0.13}_{-0.18}$	$1.13574^{+0.077}_{-0.099}$	3196	2276
t_{LLR}	-	-	-	-