

| CG model with $d = 20$ and $n = m = 2 \cdot 10^4$ | | | | | | |
|---|---|---|-------------|---|---|------------|
| Statistic | μ -deformation | | | Σ_{ii} -deformation | | |
| | $\epsilon_{95\%CL}$ | $\epsilon_{99\%CL}$ | t (s) | $\epsilon_{95\%CL}$ | $\epsilon_{99\%CL}$ | t (s) |
| t_{SW} | $0.07086^{+0.034}_{-0.031}$ | $0.09763^{+0.033}_{-0.03}$ | 496 | $0.03243^{+0.0098}_{-0.01}$ | $0.04336^{+0.0093}_{-0.0091}$ | 525 |
| $t_{\overline{KS}}$ | $0.06957^{+0.034}_{-0.032}$ | $0.09504^{+0.032}_{-0.032}$ | 366 | $0.04632^{+0.015}_{-0.015}$ | $0.06199^{+0.014}_{-0.014}$ | 387 |
| t_{SKS} | $0.0699^{+0.033}_{-0.031}$ | $0.09548^{+0.032}_{-0.03}$ | 579 | $0.04131^{+0.013}_{-0.014}$ | $0.05484^{+0.012}_{-0.012}$ | 620 |
| t_{FGD} | $0.07185^{+0.041}_{-0.032}$ | $0.09756^{+0.038}_{-0.03}$ | 1094 | $0.0269^{+0.01}_{-0.0088}$ | $0.03574^{+0.0091}_{-0.0081}$ | 1179 |
| t_{MMD} | $0.08449^{+0.064}_{-0.049}$ | $0.11846^{+0.06}_{-0.045}$ | 1574 | $0.03081^{+0.026}_{-0.018}$ | $0.04364^{+0.024}_{-0.017}$ | 1679 |
| t_{NPLM} | $0.04207^{+0.014}_{-0.018}$ | $0.05062^{+0.013}_{-0.014}$ | 1947 | $0.01299^{+0.0044}_{-0.0059}$ | $0.01594^{+0.0039}_{-0.0046}$ | 2165 |
| t_{NPLM} | $0.05351^{+0.017}_{-0.022}$ | $0.06383^{+0.016}_{-0.018}$ | 23774 | $0.01378^{+0.0048}_{-0.0065}$ | $0.01685^{+0.0043}_{-0.0051}$ | 26822 |
| t_{LLR} | $0.01053^{+0.0046}_{-0.0046}$ | $0.01415^{+0.0045}_{-0.0047}$ | 1306 | $0.00253^{+0.0013}_{-0.0014}$ | $0.00353^{+0.0013}_{-0.0014}$ | 1504 |
| 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} | $0.04358^{+0.011}_{-0.013}$ | $0.06168^{+0.0092}_{-0.01}$ | 1024 | $0.00681^{+0.0027}_{-0.0027}$ | $0.00928^{+0.0025}_{-0.0025}$ | 566 |
| $t_{\overline{KS}}$ | $1.04753^{+0.011}_{-0.016}$ | $1.06042^{+0.017}_{-0.011}$ | 1376 | $0.00901^{+0.0033}_{-0.0034}$ | $0.01206^{+0.003}_{-0.0032}$ | 422 |
| t_{SKS} | $0.05959^{+0.016}_{-0.02}$ | $0.08015^{+0.015}_{-0.016}$ | 1128 | $0.00745^{+0.0027}_{-0.0029}$ | $0.0099^{+0.0025}_{-0.0026}$ | 632 |
| t_{FGD} | $0.00749^{+0.0018}_{-0.0019}$ | $0.01011^{+0.0016}_{-0.0017}$ | 2468 | $0.00623^{+0.003}_{-0.0025}$ | $0.00837^{+0.0027}_{-0.0023}$ | 1085 |
| t_{MMD} | $0.05154^{+0.032}_{-0.023}$ | $0.07052^{+0.032}_{-0.022}$ | 2534 | $0.00488^{+0.0042}_{-0.0029}$ | $0.00687^{+0.0039}_{-0.0027}$ | 1853 |
| t_{NPLM} | $0.00331^{+0.0013}_{-0.0015}$ | $0.00417^{+0.0011}_{-0.0013}$ | 2864 | $0.00377^{+0.0014}_{-0.0018}$ | $0.00459^{+0.0012}_{-0.0014}$ | 2455 |
| t_{NPLM} | $0.00271^{+0.0012}_{-0.0015}$ | $0.00347^{+0.0012}_{-0.0013}$ | 36589 | $0.00391^{+0.0015}_{-0.0019}$ | $0.00478^{+0.0013}_{-0.0016}$ | 33561 |
| t_{LLR} | - | - | - | $0.00069^{+0.0004}_{-0.0004}$ | $0.00098^{+0.00039}_{-0.0004}$ | 1628 |
| Statistic | pow_- -deformation | | | \mathcal{N} -deformation | | |
| | $\epsilon_{95\%CL}$ | $\epsilon_{99\%CL}$ | t (s) | $\epsilon_{95\%CL}$ | $\epsilon_{99\%CL}$ | t (s) |
| t_{SW} | $0.00748^{+5}_{-0.0026}$ | $0.01003^{+5}_{-0.0024}$ | 513 | $0.36054^{+0.048}_{-0.063}$ | $0.42418^{+0.041}_{-0.045}$ | 472 |
| $t_{\overline{KS}}$ | $0.00946^{+0.003}_{-0.0031}$ | $0.01227^{+0.0029}_{-0.0028}$ | 418 | $0.40421^{+0.061}_{-0.079}$ | $0.47653^{+0.053}_{-0.058}$ | 353 |
| t_{SKS} | $0.00803^{+0.0027}_{-0.0029}$ | $0.01046^{+0.0025}_{-0.0026}$ | 635 | $0.35347^{+0.055}_{-0.07}$ | $0.41869^{+0.042}_{-0.056}$ | 519 |
| t_{FGD} | $0.0067^{+0.0027}_{-0.0023}$ | $0.00886^{+0.0025}_{-0.0021}$ | 1090 | $0.21348^{+0.022}_{-0.03}$ | $0.24723^{+0.014}_{-0.019}$ | 850 |
| t_{MMD} | $0.00568^{+0.0037}_{-0.0025}$ | $0.00784^{+0.0036}_{-0.0025}$ | 1925 | $0.87964^{+0.19}_{-0.23}$ | $1.04846^{+0.14}_{-0.15}$ | 1413 |
| t_{NPLM} | $0.0044^{+0.0015}_{-0.0019}$ | $0.00523^{+0.0013}_{-0.0015}$ | 2299 | $0.12476^{+0.019}_{-0.031}$ | $0.13748^{+0.015}_{-0.022}$ | 1812 |
| t_{NPLM} | $0.00528^{+0.0015}_{-0.0018}$ | $0.00617^{+0.0013}_{-0.0015}$ | 26885 | $0.09544^{+0.016}_{-0.026}$ | $0.10546^{+0.014}_{-0.018}$ | 21954 |
| t_{LLR} | $0.00061^{+0.0004}_{-0.0004}$ | $0.0009^{+0.00039}_{-0.0004}$ | 1652 | - | - | - |
| Statistic | \mathcal{U} -deformation | | | Timing | | |
| | $\epsilon_{95\%CL}$ | $\epsilon_{99\%CL}$ | t (s) | t^{null} (s) | | |
| t_{SW} | $0.62405^{+0.086}_{-0.1}$ | $0.73669^{+0.072}_{-0.076}$ | 458 | 276 | | |
| $t_{\overline{KS}}$ | $0.69433^{+0.11}_{-0.13}$ | $0.8144^{+0.099}_{-0.1}$ | 337 | 108 | | |
| t_{SKS} | $0.61401^{+0.092}_{-0.12}$ | $0.72149^{+0.078}_{-0.092}$ | 505 | 398 | | |
| t_{FGD} | $0.37006^{+0.038}_{-0.053}$ | $0.42858^{+0.025}_{-0.033}$ | 812 | 1150 | | |
| t_{MMD} | $1.53597^{+0.32}_{-0.42}$ | $1.81389^{+0.26}_{-0.27}$ | 1386 | 2284 | | |
| t_{NPLM} | $0.21588^{+0.033}_{-0.054}$ | $0.23788^{+0.027}_{-0.035}$ | 1695 | 3480 | | |
| t_{NPLM} | $0.16518^{+0.028}_{-0.046}$ | $0.18251^{+0.024}_{-0.031}$ | 21414 | 44027 | | |
| t_{LLR} | - | - | - | - | | |