

| Jet features with $n = m = 2 \cdot 10^4$ |   |   |             |   |   |             |
|--|---|---|-------------|---|---|-------------|
| Statistic                                | $\mu$ -deformation                              |   |             | $\Sigma_{ii}$ -deformation                    |   |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}$                             | $t$ (s)     | $\epsilon_{95\%CL}$                           | $\epsilon_{99\%CL}$                           | $t$ (s)     |
| $t_{SW}$                                 | $0.05186^{+0.025}_{-0.023}$                     | $0.07216^{+0.025}_{-0.024}$                     | <b>1664</b> | $0.07448^{+0.029}_{-0.029}$                   | $0.0984^{+0.032}_{-0.02}$                     | <b>1380</b> |
| $t_{\overline{KS}}$                      | <b><math>0.02318^{+0.0087}_{-0.0083}</math></b> | <b><math>0.03219^{+0.0072}_{-0.0059}</math></b> | 2267        | <b><math>0.0318^{+0.013}_{-0.013}</math></b>  | <b><math>0.04278^{+0.012}_{-0.012}</math></b> | 3461        |
| $t_{SKS}$                                | $0.03946^{+0.024}_{-0.019}$                     | $0.05569^{+0.021}_{-0.019}$                     | 5360        | $0.07534^{+0.031}_{-0.036}$                   | $0.10305^{+0.03}_{-0.03}$                     | 6425        |
| $t_{FGD}$                                | $0.06884^{+0.037}_{-0.033}$                     | $0.09667^{+0.033}_{-0.026}$                     | 4825        | $0.06675^{+0.051}_{-0.033}$                   | $0.09904^{+0.042}_{-0.03}$                    | 3862        |
| $t_{MMD}$                                | $0.08117^{+0.057}_{-0.037}$                     | $0.11894^{+0.048}_{-0.041}$                     | 7517        | $0.13508^{+0.11}_{-0.06}$                     | $0.18666^{+0.1}_{-0.063}$                     | 12604       |
| Statistic                                | $\Sigma_{i \neq j}$ -deformation                |   |             | $\text{pow}_+$ -deformation                   |   |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}$                             | $t$ (s)     | $\epsilon_{95\%CL}$                           | $\epsilon_{99\%CL}^{\text{pow}_+}$            | $t$ (s)     |
| $t_{SW}$                                 | $0.29796^{+0.09}_{-0.1}$                        | $0.47482^{+0.11}_{-0.12}$                       | <b>1610</b> | $0.04164^{+0.013}_{-0.015}$                   | $0.05757^{+0.013}_{-0.011}$                   | <b>1420</b> |
| $t_{\overline{KS}}$                      | $1.03359^{+0.0094}_{-0.015}$                    | $1.04904^{+0.0051}_{-0.017}$                    | 2675        | $0.03478^{+0.016}_{-0.014}$                   | <b><math>0.04595^{+0.015}_{-0.014}</math></b> | 5713        |
| $t_{SKS}$                                | $0.27254^{+0.14}_{-0.11}$                       | $0.42699^{+0.16}_{-0.14}$                       | 7404        | $0.04056^{+0.023}_{-0.02}$                    | $0.06085^{+0.021}_{-0.02}$                    | 9058        |
| $t_{FGD}$                                | <b><math>0.1857^{+0.061}_{-0.059}</math></b>    | <b><math>0.28294^{+0.06}_{-0.056}</math></b>    | 3880        | <b><math>0.03468^{+0.026}_{-0.017}</math></b> | $0.05326^{+0.024}_{-0.017}$                   | 5750        |
| $t_{MMD}$                                | $1.0882^{+0.13}_{-0.098}$                       | $1.17019^{+0.09}_{-0.065}$                      | 11993       | $0.04694^{+0.034}_{-0.021}$                   | $0.06351^{+0.029}_{-0.022}$                   | 17382       |
| Statistic                                | $\text{pow}_-$ -deformation                     |   |             | $\mathcal{N}$ -deformation                    |   |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}^{\text{pow}_-}$              | $t$ (s)     | $\epsilon_{95\%CL}$                           | $\epsilon_{99\%CL}^{\mathcal{N}}$             | $t$ (s)     |
| $t_{SW}$                                 | $0.04314^{+0.011}_{-0.016}$                     | $0.05784^{+0.011}_{-0.0092}$                    | <b>1455</b> | $0.16842^{+0.038}_{-0.029}$                   | $0.20253^{+0.032}_{-0.023}$                   | <b>1619</b> |
| $t_{\overline{KS}}$                      | <b><math>0.03325^{+0.013}_{-0.014}</math></b>   | <b><math>0.04388^{+0.015}_{-0.014}</math></b>   | 6958        | <b><math>0.13286^{+0.021}_{-0.021}</math></b> | <b><math>0.15579^{+0.015}_{-0.022}</math></b> | 7531        |
| $t_{SKS}$                                | $0.04166^{+0.019}_{-0.02}$                      | $0.05648^{+0.017}_{-0.017}$                     | 10183       | $0.1366^{+0.032}_{-0.031}$                    | $0.16654^{+0.024}_{-0.021}$                   | 10532       |
| $t_{FGD}$                                | $0.03869^{+0.029}_{-0.019}$                     | $0.0579^{+0.025}_{-0.02}$                       | 5036        | $0.21908^{+0.054}_{-0.078}$                   | $0.25678^{+0.049}_{-0.041}$                   | 6081        |
| $t_{MMD}$                                | $0.04811^{+0.036}_{-0.022}$                     | $0.07506^{+0.035}_{-0.026}$                     | 10638       | $0.32588^{+0.11}_{-0.093}$                    | $0.39574^{+0.088}_{-0.072}$                   | 16715       |
| Statistic                                | $\mathcal{U}$ -deformation                      |   |             | Timing  |   |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}^{\mathcal{U}}$               | $t$ (s)     | $t^{\text{null}}$ (s)                         |   |             |
| $t_{SW}$                                 | $0.28981^{+0.065}_{-0.047}$                     | $0.35332^{+0.051}_{-0.04}$                      | <b>1491</b> | <b>272</b>                                    |   |             |
| $t_{\overline{KS}}$                      | <b><math>0.23279^{+0.026}_{-0.048}</math></b>   | <b><math>0.25815^{+0.027}_{-0.017}</math></b>   | 9488        | 321   |   |             |
| $t_{SKS}$                                | $0.23779^{+0.044}_{-0.06}$                      | $0.2825^{+0.037}_{-0.043}$                      | 10363       | 870   |   |             |
| $t_{FGD}$                                | $0.38158^{+0.09}_{-0.12}$                       | $0.44725^{+0.085}_{-0.067}$                     | 6239        | 499   |   |             |
| $t_{MMD}$                                | $0.59421^{+0.21}_{-0.16}$                       | $0.71936^{+0.16}_{-0.1}$                        | 20050       | 949   |   |             |
| $t_{LLR}$                                | -   | -   | -           | -   |   |             |