

| Characteristics of the graphs |       |         |              | MASC |                  |     |          |          |       |
|-------------------------------|-------|---------|--------------|------|------------------|-----|----------|----------|-------|
| Name                          | $ V $ | $ E $   | $\Sigma$     | $k$  | $\Sigma_*(k_*)$  | SR  | Avg.     | $\sigma$ | $t$   |
| myciel3                       | 11    | 20      | 21           | 4    | 21(4)            | 1.0 | 21.0     | 0.0      | 0.0   |
| myciel4                       | 23    | 71      | 45           | 5    | 45(5)            | 1.0 | 45.0     | 0.0      | 0.0   |
| myciel5                       | 47    | 236     | 93           | 6    | 93(6)            | 1.0 | 93.0     | 0.0      | 0.0   |
| myciel6                       | 95    | 755     | 189          | 7    | 189(7)           | 1.0 | 189.0    | 0.0      | 0.1   |
| myciel7                       | 191   | 2360    | 381          | 8    | 381(8)           | 1.0 | 381.0    | 0.0      | 1.1   |
| anna                          | 138   | 986     | 276          | 11   | 276(11)          | 1.0 | 276.0    | 0.0      | 0.1   |
| david                         | 87    | 812     | 237          | 11   | 237(11)          | 1.0 | 237.0    | 0.0      | 0.1   |
| huck                          | 74    | 602     | 243          | 11   | 243(11)          | 1.0 | 243.0    | 0.0      | 0.0   |
| jean                          | 80    | 508     | 217          | 10   | 217(10)          | 1.0 | 217.0    | 0.0      | 0.0   |
| homer                         | 561   | 1629    | -            | 10   | <b>1 123(12)</b> | 1.0 | 1 136.2  | 5.8      | 80.6  |
| queen5.5                      | 25    | 160     | 75           | 5    | 75(5)            | 1.0 | 75.0     | 0.0      | 0.0   |
| queen6.6                      | 36    | 290     | 138          | 7    | 138(8)           | 1.0 | 138.0    | 0.0      | 1.1   |
| queen7.7                      | 49    | 476     | 196          | 7    | 196(7)           | 1.0 | 196.0    | 0.0      | 0.0   |
| queen8.8                      | 64    | 728     | 291          | 9    | 291(9)           | 1.0 | 291.0    | 0.0      | 12.8  |
| queen9.9                      | 81    | 2 112   | -            | 10   | <b>409(10)</b>   | 0.3 | 410.5    | 1.2      | 1.2   |
| queen8.12                     | 96    | 1 368   | -            | 12   | <b>624(12)</b>   | 1.0 | 624.0    | 0.0      | 0.0   |
| games120                      | 120   | 638     | 443          | 9    | 443(9)           | 1.0 | 443.0    | 0.0      | 0.5   |
| miles250                      | 128   | 387     | 325          | 8    | 325(8)           | 1.0 | 325.0    | 0.0      | 0.4   |
| miles500                      | 128   | 1 170   | $\leq 709$   | 20   | <b>705(20)</b>   | 1.0 | 705.0    | 0.0      | 1.0   |
| fpsol2.i.1                    | 496   | 11 654  | 3 403        | 65   | 3 403(65)        | 1.0 | 3 403.0  | 0.0      | 8.7   |
| fpsol2.i.2                    | 451   | 8 691   | -            | 30   | <b>1 668(30)</b> | 1.0 | 1 668.0  | 0.0      | 5.7   |
| fpsol2.i.3                    | 425   | 8 688   | -            | 30   | <b>1 636(30)</b> | 1.0 | 1 636.0  | 0.0      | 7.0   |
| mug88.1                       | 88    | 146     | 178          | 4    | 178(4)           | 1.0 | 178.0    | 0.0      | 0.1   |
| mug88.25                      | 88    | 146     | 178          | 4    | 178(4)           | 1.0 | 178.0    | 0.0      | 0.2   |
| mug100.1                      | 100   | 166     | 202          | 4    | 202(4)           | 1.0 | 202.0    | 0.0      | 0.2   |
| mug100.25                     | 100   | 166     | 202          | 4    | 202(4)           | 1.0 | 202.0    | 0.0      | 0.3   |
| 2-Insertions.3                | 37    | 72      | 62           | 4    | 62(4)            | 1.0 | 62.0     | 0.0      | 0.0   |
| 3-Insertions.3                | 56    | 110     | 92           | 4    | 92(4)            | 1.0 | 92.0     | 0.0      | 0.0   |
| inithx.i.1                    | 864   | 18 707  | -            | 54   | <b>3 676(54)</b> | 1.0 | 3 676.0  | 0.0      | 7.6   |
| inithx.i.2                    | 645   | 13 979  | -            | 31   | <b>2 050(31)</b> | 1.0 | 2 050.0  | 0.0      | 4.4   |
| inithx.i.3                    | 621   | 13 969  | -            | 31   | <b>1 986(31)</b> | 1.0 | 1 986.0  | 0.0      | 1.8   |
| mulsol.i.1                    | 197   | 3 925   | -            | 49   | <b>1 957(49)</b> | 1.0 | 1 957.0  | 0.0      | 0.1   |
| mulsol.i.2                    | 188   | 3 885   | -            | 31   | <b>1 191(31)</b> | 1.0 | 1 191.0  | 0.0      | 0.2   |
| mulsol.i.3                    | 184   | 3 916   | -            | 31   | <b>1 187(31)</b> | 1.0 | 1 187.0  | 0.0      | 0.2   |
| mulsol.i.4                    | 185   | 3 946   | -            | 31   | <b>1 189(31)</b> | 1.0 | 1 189.0  | 0.0      | 0.2   |
| mulsol.i.5                    | 186   | 3 973   | -            | 31   | <b>1 160(31)</b> | 1.0 | 1 160.0  | 0.0      | 0.2   |
| zeroin.i.1                    | 211   | 4 100   | -            | 49   | <b>1 822(49)</b> | 1.0 | 1 822.0  | 0.0      | 0.2   |
| zeroin.i.2                    | 211   | 3 541   | 1 004        | 30   | 1 004(30)        | 1.0 | 1 004.0  | 0.0      | 0.1   |
| zeroin.i.3                    | 206   | 3 540   | 998          | 30   | 998(30)          | 1.0 | 998.0    | 0.0      | 0.1   |
| DSJC125.1                     | 125   | 736     | 326          | 5    | 326(7)           | 0.7 | 326.6    | 0.9      | 4.4   |
| DSJC125.5                     | 125   | 3 891   | 1 012        | 17   | 1 012(18)        | 0.1 | 1 020.0  | 3.9      | 3.5   |
| DSJC125.9                     | 125   | 6 961   | 2 503        | 44   | 2 503(44)        | 0.5 | 2 508.0  | 5.6      | 1.9   |
| DSJC250.1                     | 250   | 3 218   | 973          | 8    | 974(9)           | 0.0 | 990.5    | 8.3      | 17.3  |
| DSJC250.5                     | 250   | 15 668  | 3 219        | 28   | 3 230(31)        | 0.0 | 3 253.7  | 14.3     | 23.1  |
| DSJC250.9                     | 250   | 27 897  | $\leq 8 286$ | 72   | <b>8 280(74)</b> | 0.1 | 8 322.7  | 22.3     | 5.6   |
| DSJC500.1                     | 500   | 12 458  | 2 850        | 12   | 2 940(14)        | 0.0 | 3 013.4  | 28.3     | 50.4  |
| DSJC500.5                     | 500   | 62 624  | 10 910       | 48   | 11 101(53)       | 0.0 | 11 303.5 | 73.9     | 202.5 |
| DSJC500.9                     | 500   | 112 437 | 29 912       | 126  | 29 994(126)      | 0.0 | 30059.1  | 31.6     | 90.9  |
| flat300_20_0                  | 300   | 21 375  | 3 150        | 20   | 3 150(20)        | 1.0 | 3 150.0  | 0.0      | 0.0   |
| flat300_26_0                  | 300   | 21 633  | 3 966        | 26   | 3 966(26)        | 1.0 | 3 966.0  | 0.0      | 0.8   |
| flat300_28_0                  | 300   | 21 695  | $\leq 4 282$ | 28   | <b>4 238(30)</b> | 0.1 | 4 313.4  | 22.3     | 309.7 |
| le450_5a                      | 450   | 5 714   | -            | 5    | <b>1 350(5)</b>  | 1.0 | 1 350.0  | 0.0      | 0.7   |
| le450_5b                      | 450   | 5 734   | -            | 5    | <b>1 350(5)</b>  | 1.0 | 1 350.0  | 0.0      | 0.4   |
| le450_5c                      | 450   | 9 803   | -            | 5    | <b>1 350(5)</b>  | 1.0 | 1 350.0  | 0.0      | 0.2   |
| le450_5d                      | 450   | 9 757   | -            | 5    | <b>1 350(5)</b>  | 1.0 | 1 350.0  | 0.0      | 0.5   |
| le450_15a                     | 450   | 8 168   | 2 632        | 15   | 2 706(19)        | 0.0 | 2 742.6  | 13.8     | 41.3  |
| le450_15b                     | 450   | 8 169   | 2 642        | 15   | 2 724(19)        | 0.0 | 2 756.2  | 14.8     | 40.3  |
| le450_15c                     | 450   | 16 680  | $\leq 3 866$ | 15   | <b>3 491(16)</b> | 1.0 | 3 491.0  | 0.0      | 45.3  |
| le450_15d                     | 450   | 16 750  | $\leq 3 921$ | 15   | <b>3 506(17)</b> | 1.0 | 3 511.8  | 3.6      | 59.8  |
| le450_25a                     | 450   | 8 260   | 3 153        | 25   | 3 166(27)        | 0.0 | 3 176.8  | 4.4      | 39.2  |
| le450_25b                     | 450   | 8 263   | 3 366        | 25   | 3 366(26)        | 0.1 | 3 375.1  | 3.4      | 40.3  |
| le450_25c                     | 450   | 17 343  | 4 515        | 25   | 4 700(31)        | 0.0 | 4 773.3  | 25.2     | 75.3  |
| le450_25d                     | 450   | 17 425  | 4 544        | 25   | 4 722(29)        | 0.0 | 4 805.7  | 27.4     | 63.4  |