

Maximal simplexes of non-threshold simplicial complexes  
on 5 – vertices and vertexes of convex realizations of its 4 – dimensional Bier spheres.

*Mathematica* notebook (.nb) file is available at:

[https://imi.pmf.kg.ac.rs/pub/m\\_timotijevic/Bier\\_Kv5\\_d4.nb](https://imi.pmf.kg.ac.rs/pub/m_timotijevic/Bier_Kv5_d4.nb)

$K_1 = \{\{2\}, \{1, 3\}, \{4, 5\}\}$

$$V_1 = \begin{pmatrix} 6.89713 & 0.698892 & -0.0508758 & 0.717926 & 0.718284 \\ 1.47422 & 6.81672 & 1.47423 & -0.146382 & -0.146023 \\ -0.0513919 & 0.699176 & 6.89661 & 0.718218 & 0.718577 \\ 1.47422 & -0.141527 & 1.47423 & 6.91007 & -0.146023 \\ 1.47422 & -0.141527 & 1.47423 & -0.146382 & 6.91043 \\ -2.02928 & -3.64503 & -2.02928 & -3.64989 & -3.64953 \\ -16.0315 & -0.141527 & 1.47423 & -0.146382 & -0.146023 \\ -1.85677 & -15.7554 & -1.85677 & 1.74137 & 1.74172 \\ 1.47422 & -0.141527 & -16.0315 & -0.146382 & -0.146023 \\ -2.50943 & 2.0537 & -2.50943 & -15.5733 & 2.1116 \\ -2.25849 & 1.91542 & -2.25849 & 1.96903 & -15.7194 \\ 11.9428 & 7.78263 & 11.9428 & 7.75208 & 7.75244 \end{pmatrix}$$

$K_2 = \{\{2\}, \{1, 5\}, \{3, 4\}, \{3, 5\}\}$

$$V_2 = \begin{pmatrix} 18.3757 & -0.124503 & -6.27923 & -6.07801 & 21.6123 \\ -1.44306 & 4.55794 & 1.75293 & 1.67527 & -1.24844 \\ -1.44306 & 0.0443944 & 10.8622 & 1.67527 & -1.24844 \\ -1.44306 & 0.0443944 & 1.75293 & 10.6216 & -1.24844 \\ 4.83474 & -0.0250143 & -1.5479 & -1.51095 & 17.1161 \\ -5.91622 & -4.42877 & -2.72024 & -2.79789 & -5.7216 \\ -17.21 & 0.0443944 & 1.75293 & 1.67527 & -1.24844 \\ 2.64268 & -15.7948 & -0.395325 & -0.398391 & 4.86579 \\ -1.74039 & 0.0476818 & -29.908 & 1.82618 & -1.69339 \\ -17.2824 & 0.219518 & 10.0811 & -21.3299 & -24.9518 \\ -1.44306 & 0.0443944 & 1.75293 & 1.67527 & -32.5003 \\ 22.0682 & 15.3703 & 12.8956 & 12.9663 & 26.2667 \end{pmatrix}$$

$K_3 = \{\{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}\}$

$$V_3 = \begin{pmatrix} 8.65736 & -1.71476 & -1.66078 & -1.66083 & 7.58283 \\ 0.590975 & 8.49086 & 0.3822 & 0.38215 & 1.537 \\ 0.590975 & 0.393694 & 8.35033 & 0.38215 & 1.537 \\ 0.590975 & 0.393694 & 0.3822 & 8.35028 & 1.537 \\ -0.679072 & 1.05665 & 1.02457 & 1.02452 & 7.59723 \\ -3.39309 & -3.59037 & -3.60186 & -3.60191 & -2.44706 \\ -11.4572 & 0.393694 & 0.3822 & 0.38215 & 1.537 \\ -3.611 & -21.6346 & 2.5075 & 2.50745 & -4.75242 \\ -3.1389 & 2.34067 & -21.5747 & 2.26867 & -4.0458 \\ -3.17538 & 2.35971 & 2.28716 & -21.5557 & -4.10039 \\ 0.590975 & 0.393694 & 0.3822 & 0.38215 & -22.3674 \\ 14.4334 & 11.1171 & 11.139 & 11.1389 & 16.385 \end{pmatrix}$$

$K_4 = \{\{1, 3\}, \{2, 3\}, \{2, 4\}, \{2, 5\}, \{3, 4\}\}$

$$V_4 = \begin{pmatrix} 8.11173 & -1.45785 & 6.76778 & -1.37807 & -1.35632 \\ -0.830241 & 9.26127 & -0.596975 & 1.0975 & 1.02766 \\ 3.30587 & -1.04778 & 13.6325 & -0.983453 & -0.976302 \\ -0.830241 & 1.11463 & -0.596975 & 9.11354 & 1.02766 \\ -0.830241 & 1.11463 & -0.596975 & 1.0975 & 8.91721 \\ -4.80638 & -2.86151 & -4.57312 & -2.87864 & -2.94848 \\ -12.8223 & 1.11463 & -0.596975 & 1.0975 & 1.02766 \\ -10.1325 & -18.1298 & -14.5234 & 5.77446 & 5.53157 \\ -0.830287 & 1.10869 & -24.3809 & 1.09175 & 1.02209 \\ 11.7364 & -5.46183 & 18.2061 & -29.1987 & -5.06699 \\ -7.53718 & 4.61208 & -10.6442 & 4.46315 & -18.9223 \\ 15.4654 & 10.6328 & 17.9032 & 10.7035 & 10.7165 \end{pmatrix}$$

$$K_5 = \{\{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}, \{3, 4\}\}$$

$$V_5 = \begin{pmatrix} 6.56674 & -0.645425 & -0.628503 & -0.63282 & 4.39114 \\ 0.61653 & 8.51346 & 0.346525 & 0.341296 & 1.52872 \\ 0.61653 & 0.366824 & 8.36256 & 0.341296 & 1.52872 \\ 0.61653 & 0.366824 & 0.346525 & 8.35733 & 1.52872 \\ 0.576118 & 0.387944 & 0.366868 & 0.36162 & 9.35833 \\ -3.35961 & -3.60932 & -3.62962 & -3.63485 & -2.44742 \\ -11.3755 & 0.366824 & 0.346525 & 0.341296 & 1.52872 \\ -1.90278 & -22.5368 & 1.61155 & 1.60513 & -2.19749 \\ -3.98498 & 2.76571 & -21.0462 & 2.64977 & -5.2771 \\ -7.13875 & 4.41351 & 4.24437 & -19.4017 & -9.93828 \\ 0.616461 & 0.357798 & 0.337782 & 0.332553 & -21.7777 \\ 18.1527 & 9.25267 & 9.34164 & 9.33908 & 21.7736 \end{pmatrix}$$

$$K_6 = \{\{1, 2\}, \{3, 4, 5\}\}$$

$$V_6 = \begin{pmatrix} 283.784 & 316.104 & -410.132 & -410.162 & -410.162 \\ 296.852 & 343.902 & -436.565 & -436.595 & -436.595 \\ -172.049 & -194.558 & 262.755 & 251.681 & 251.68 \\ -172.049 & -194.558 & 251.711 & 262.725 & 251.68 \\ -172.049 & -194.558 & 251.711 & 251.681 & 262.725 \\ -175.704 & -198.213 & 248.056 & 248.026 & 248.026 \\ -181.871 & -194.558 & 251.711 & 251.681 & 251.68 \\ -172.049 & -209.13 & 251.711 & 251.681 & 251.68 \\ -161.975 & -183.149 & 207.234 & 236.894 & 236.894 \\ -178.062 & -201.368 & 260.537 & 231.176 & 260.507 \\ -178.156 & -201.475 & 260.675 & 260.645 & 231.317 \\ 983.328 & 1111.56 & -1399.4 & -1399.43 & -1399.43 \end{pmatrix}$$

$$K_7 = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{3, 4\}\}$$

$$V_7 = \begin{pmatrix} 6.95559 & -0.155716 & 0.767036 & 0.767564 & 0.746207 \\ 0.0266194 & 7.02086 & 0.670263 & 0.670791 & 0.652093 \\ 1.47509 & 1.45608 & 6.87673 & -0.136772 & -0.13328 \\ 1.47509 & 1.45608 & -0.137299 & 6.87726 & -0.13328 \\ 1.47509 & 1.45608 & -0.137299 & -0.136772 & 6.78372 \\ -2.0075 & -2.0265 & -3.61989 & -3.61936 & -3.61587 \\ -16.2722 & 1.45608 & -0.137299 & -0.136772 & -0.13328 \\ 1.47509 & -16.0422 & -0.137299 & -0.136772 & -0.13328 \\ -2.39728 & -2.39183 & -15.4104 & 2.02219 & 1.96636 \\ -2.02722 & -2.0241 & 1.81534 & -15.6225 & 1.7657 \\ -2.14376 & -2.13991 & 1.88031 & 1.88084 & -15.3663 \\ 11.9654 & 11.9351 & 7.56983 & 7.57036 & 7.60122 \end{pmatrix}$$

$$K_8 = \{\{1, 3\}, \{2, 4\}, \{1, 4, 5\}\}$$

$$V_8 = \begin{pmatrix} 6.23353 & -2.72732 & 0.77068 & 3.08236 & 2.98469 \\ -1.70475 & 3.67865 & 0.492193 & 1.96154 & 1.8967 \\ 2.75668 & 1.42355 & 4.91449 & -0.243527 & -0.243757 \\ 2.75668 & 1.42355 & -0.0556894 & 9.79663 & -0.243757 \\ 2.75668 & 1.42355 & -0.0556894 & -0.243527 & 9.59876 \\ -0.567792 & -1.90091 & -3.38016 & -3.568 & -3.56823 \\ -21.0024 & 1.42216 & -0.0570403 & -0.24904 & -0.249107 \\ 2.75668 & -10.3011 & -0.0556894 & -0.243527 & -0.243757 \\ 2.09412 & 1.01486 & -11.578 & 0.0839392 & 0.0741145 \\ 2.47555 & 1.25222 & -0.0231744 & -23.3889 & -0.1168 \\ -4.39392 & -2.98526 & 0.820473 & 3.28269 & -19.5513 \\ 5.83896 & 6.27608 & 8.20762 & 9.7293 & 9.66243 \end{pmatrix}$$

$$K_9 = \{\{1, 3\}, \{2, 3\}, \{2, 4, 5\}\}$$

$$V_9 = \begin{pmatrix} 259.177 & -262.381 & 316.902 & -253.942 & -253.941 \\ -283.017 & 299.661 & -352.122 & 279.086 & 279.087 \\ 413.805 & -426.363 & 524.531 & -412.62 & -412.62 \\ -283.017 & 288.46 & -352.122 & 290.042 & 279.087 \\ -283.017 & 288.46 & -352.122 & 279.086 & 290.043 \\ -286.669 & 284.807 & -355.774 & 275.434 & 275.435 \\ -292.823 & 288.46 & -352.122 & 279.086 & 279.087 \\ -290.38 & 266.572 & -361.299 & 286.387 & 286.388 \\ -283.017 & 288.46 & -366.724 & 279.086 & 279.087 \\ -290.904 & 296.542 & -361.952 & 258.127 & 286.908 \\ -290.681 & 296.313 & -361.673 & 286.686 & 257.9 \\ 1910.54 & -1908.99 & 2374.48 & -1846.46 & -1846.46 \end{pmatrix}$$

$$K_{10} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{1, 4, 5\}\}$$

$$V_{10} = \begin{pmatrix} 267.09 & -324.604 & -324.605 & 257.855 & 257.852 \\ -389.798 & 495.379 & 486.519 & -391.183 & -391.186 \\ -391.518 & 488.677 & 497.546 & -392.909 & -392.912 \\ 256.907 & -324.604 & -324.605 & 267.835 & 257.852 \\ 256.907 & -324.604 & -324.605 & 257.855 & 267.832 \\ 253.581 & -327.931 & -327.932 & 254.529 & 254.525 \\ 226.827 & -316.056 & -316.057 & 250.986 & 250.983 \\ 256.907 & -336.27 & -324.605 & 257.855 & 257.852 \\ 256.907 & -324.604 & -336.271 & 257.855 & 257.852 \\ 259.522 & -327.884 & -327.885 & 237.222 & 260.476 \\ 261.051 & -329.801 & -329.802 & 262.014 & 238.795 \\ -1514.38 & 1952.3 & 1952.3 & -1519.92 & -1519.92 \end{pmatrix}$$

$$K_{11} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}, \{3, 4\}\}$$

$$V_{11} = \begin{pmatrix} 6.9313 & -0.160896 & 0.777532 & 0.776023 & 0.76796 \\ -0.487827 & 6.60246 & 0.959468 & 0.957959 & 0.944907 \\ 0.840841 & 0.841031 & 7.21964 & 0.218127 & 0.225363 \\ 0.840841 & 0.841031 & 0.219636 & 7.21813 & 0.225363 \\ 0.840841 & 0.841031 & 0.219636 & 0.218127 & 7.12872 \\ -2.63483 & -2.63464 & -3.25603 & -3.25754 & -3.25031 \\ -16.821 & 0.841031 & 0.219636 & 0.218127 & 0.225363 \\ 0.840841 & -16.8208 & 0.219636 & 0.218127 & 0.225363 \\ -1.31316 & -1.31297 & -15.9586 & 1.41752 & 1.39187 \\ -2.36839 & -2.3682 & 2.00661 & -15.3544 & 1.96333 \\ 7.00503 & 7.00522 & -3.21272 & -3.21423 & -20.3913 \\ 6.32549 & 6.32568 & 10.5855 & 10.584 & 10.5434 \end{pmatrix}$$

$$K_{12} = \{\{1, 2\}, \{2, 3\}, \{2, 4\}, \{3, 4, 5\}\}$$

$$V_{12} = \begin{pmatrix} 223.251 & 217.823 & -175.007 & -175.111 & -171.861 \\ 313.905 & 322.984 & -253.543 & -253.682 & -248.976 \\ -148.493 & -149.415 & 129.62 & 119.525 & 117.314 \\ -148.493 & -149.415 & 119.498 & 129.646 & 117.314 \\ -148.493 & -149.415 & 119.498 & 119.525 & 127.235 \\ -151.822 & -152.744 & 116.169 & 116.196 & 113.985 \\ -160.101 & -149.415 & 119.498 & 119.525 & 117.314 \\ -148.493 & -161.139 & 119.498 & 119.525 & 117.314 \\ -141.97 & -142.852 & 90.7557 & 114.246 & 112.133 \\ -156.496 & -157.466 & 125.941 & 102.82 & 123.641 \\ -154.881 & -155.841 & 124.647 & 124.677 & 99.3947 \\ 822.087 & 826.895 & -636.576 & -636.891 & -624.808 \end{pmatrix}$$

$$K_{13} = \{\{1, 3\}, \{1, 4\}, \{2, 5\}, \{2, 3, 4\}\}$$

$$V_{13} = \begin{pmatrix} 5.04297 & 0.429767 & 0.872795 & 0.86622 & 0.218484 \\ -2.58336 & 6.41659 & 2.93825 & 2.93168 & 0.734848 \\ 1.5493 & 2.85872 & 9.61984 & -0.346895 & -0.0847953 \\ 1.5493 & 2.85872 & -0.34032 & 9.61326 & -0.0847953 \\ 1.5493 & 2.85872 & -0.34032 & -0.346895 & 4.89528 \\ -1.77075 & -0.461336 & -3.66037 & -3.66695 & -3.40485 \\ -10.1766 & 2.85872 & -0.34032 & -0.346895 & -0.0847953 \\ 1.54326 & -20.1017 & -0.36376 & -0.370335 & -0.0906553 \\ -0.223416 & 0.0428591 & -22.1128 & 1.05946 & 0.266793 \\ -3.77011 & -5.59087 & 3.87974 & -19.2267 & 0.970221 \\ -0.0145977 & 0.374555 & 0.900371 & 0.893796 & -11.3664 \\ 7.30472 & 7.45527 & 8.94688 & 8.9403 & 8.03061 \end{pmatrix}$$

$$K_{14} = \{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3, 4\}\}$$

$$V_{14} = \begin{pmatrix} 115.566 & -188.229 & -188.231 & -188.173 & 102.579 \\ -234.886 & 418.005 & 406.884 & 406.942 & -222.149 \\ -236.896 & 410.37 & 421.511 & 410.426 & -224.051 \\ -178.306 & 308.814 & 308.812 & 319.313 & -168.636 \\ 108.452 & -188.229 & -188.231 & -188.173 & 109.496 \\ 104.97 & -191.712 & -191.714 & -191.655 & 99.0959 \\ 96.9263 & -198.696 & -198.698 & -198.64 & 108.29 \\ 108.452 & -205.727 & -188.231 & -188.173 & 102.579 \\ 108.452 & -188.229 & -205.729 & -188.173 & 102.579 \\ 108.452 & -188.229 & -188.231 & -205.671 & 102.579 \\ 103.472 & -179.596 & -179.598 & -179.54 & 80.4653 \\ -204.656 & 391.457 & 391.455 & 391.514 & -192.825 \end{pmatrix}$$

$$K_{15} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}, \{3, 4\}, \{3, 5\}\}$$

$$V_{15} = \begin{pmatrix} 7.16317 & 0.112621 & 0.565195 & 0.550576 & 0.55233 \\ 0.115149 & 7.16571 & 0.564328 & 0.549733 & 0.551487 \\ 1.14293 & 1.14293 & 7.26839 & 0.206941 & 0.208694 \\ 1.14293 & 1.14293 & 0.211938 & 7.16519 & 0.208694 \\ 1.14293 & 1.14293 & 0.211938 & 0.206941 & 7.16694 \\ -2.33619 & -2.3362 & -3.26719 & -3.27218 & -3.27043 \\ -16.4366 & 1.14293 & 0.211938 & 0.206941 & 0.208694 \\ 1.14293 & -16.4366 & 0.211938 & 0.206941 & 0.208694 \\ -2.25935 & -2.25935 & -16.1525 & 1.34169 & 1.34344 \\ -1.64606 & -1.64606 & 1.16818 & -16.1585 & 1.1389 \\ -0.150025 & -0.150027 & 0.655247 & 0.638176 & -16.6768 \\ 10.9782 & 10.9782 & 8.35063 & 8.35757 & 8.35933 \end{pmatrix}$$

$$K_{16} = \{\{1, 3\}, \{1, 4\}, \{2, 5\}, \{3, 5\}, \{2, 3, 4\}\}$$

$$V_{16} = \begin{pmatrix} 6.78345 & 2.90803 & -1.17578 & -1.11535 & -0.28352 \\ -2.55049 & 6.97649 & 4.11492 & 4.01954 & 1.02596 \\ 0.485194 & 1.16183 & 10.4494 & 0.383697 & 0.0987602 \\ 0.485194 & 1.16183 & 0.368755 & 10.2651 & 0.0987602 \\ 0.485194 & 1.16183 & 0.368755 & 0.383697 & 5.08878 \\ -2.83046 & -2.15382 & -2.94689 & -2.93195 & -3.21689 \\ -11.242 & 1.16183 & 0.368755 & 0.383697 & 0.0987602 \\ 0.485194 & -22.2926 & 0.368755 & 0.383697 & 0.0987602 \\ -8.02642 & -10.7133 & -12.3818 & 10.5781 & 2.69848 \\ 5.47555 & 8.12423 & -5.78957 & -28.6992 & -1.42546 \\ 3.38664 & 5.20985 & -3.21177 & -3.09138 & -12.4314 \\ 7.06297 & 7.29387 & 9.46643 & 9.44038 & 8.149 \end{pmatrix}$$

$$K_{17} = \{\{1, 2\}, \{1, 3\}, \{2, 3\}, \{2, 4\}, \{1, 4, 5\}\}$$

$$V_{17} = \begin{pmatrix} 184.56 & -211.944 & -210.686 & 169.132 & 164.168 \\ -310.573 & 382.746 & 372.705 & -301.406 & -292.584 \\ -317.175 & 382.953 & 388.391 & -307.812 & -298.802 \\ 174.314 & -211.944 & -210.686 & 179.172 & 164.168 \\ 174.314 & -211.944 & -210.686 & 169.132 & 174.011 \\ 170.99 & -215.268 & -214.01 & 165.808 & 160.844 \\ 157.377 & -219.985 & -218.679 & 175.573 & 170.42 \\ 174.314 & -223.668 & -210.686 & 169.132 & 164.168 \\ 174.314 & -211.944 & -222.294 & 169.132 & 164.168 \\ 180.556 & -219.507 & -218.203 & 152.075 & 170.048 \\ 173.4 & -210.845 & -209.594 & 168.245 & 140.459 \\ -936.392 & 1171.35 & 1164.43 & -908.184 & -881.068 \end{pmatrix}$$

$$K_{18} = \{\{1, 2\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}, \{1, 3, 4\}\}$$

$$V_{18} = \begin{pmatrix} 63.038 & -31.1315 & 54.8867 & 54.9082 & -29.4694 \\ -39.852 & 30.4294 & -39.6379 & -39.6164 & 22.0458 \\ 103.633 & -58.8187 & 110.931 & 102.963 & -55.6587 \\ 66.1749 & -37.373 & 65.7196 & 73.4725 & -35.3733 \\ -39.852 & 23.33 & -39.6379 & -39.6164 & 28.9492 \\ -43.3276 & 19.8543 & -43.1136 & -43.0921 & 18.5701 \\ -57.5138 & 23.33 & -39.6379 & -39.6164 & 22.0458 \\ -38.4623 & 4.8484 & -38.257 & -38.2355 & 21.2932 \\ -39.852 & 23.33 & -57.0525 & -39.6164 & 22.0458 \\ -39.852 & 23.33 & -39.6379 & -57.0309 & 22.0458 \\ -50.1762 & 29.2409 & -49.897 & -49.8754 & 10.6375 \\ 116.042 & -50.3699 & 115.335 & 115.356 & -47.1319 \end{pmatrix}$$

$$K_{19} = \{\{1, 2\}, \{2, 5\}, \{1, 3, 4\}, \{2, 3, 4\}\}$$

$$V_{19} = \begin{pmatrix} 67.9488 & -48.8096 & 99.8624 & 99.8782 & -12.2673 \\ -22.3541 & 28.613 & -35.0978 & -35.082 & 4.60703 \\ 55.0529 & -42.8998 & 98.7033 & 88.0199 & -10.7846 \\ 35.1897 & -27.1569 & 56.4153 & 66.9406 & -6.83501 \\ -22.3541 & 18.4504 & -35.0978 & -35.082 & 9.58711 \\ -25.6741 & 15.1304 & -38.4179 & -38.4021 & 1.28698 \\ -34.08 & 18.4504 & -35.0978 & -35.082 & 4.60703 \\ -31.485 & 2.92294 & -49.6326 & -49.6168 & 6.41563 \\ -22.3541 & 18.4504 & -58.3161 & -35.082 & 4.60703 \\ -22.3541 & 18.4504 & -35.0978 & -58.3003 & 4.60703 \\ -28.2491 & 23.1226 & -44.4727 & -44.4569 & -5.76433 \\ 50.713 & -24.7243 & 76.2495 & 76.2653 & -0.0666102 \end{pmatrix}$$

$$K_{20} = \{\{1, 3\}, \{1, 4\}, \{2, 3\}, \{2, 4\}, \{3, 4\}, \{1, 2, 5\}\}$$

$$V_{20} = \begin{pmatrix} 543.642 & 530.737 & -296.102 & -296.096 & 523.681 \\ 306.504 & 318.103 & -171.317 & -171.311 & 302.369 \\ -317.996 & -317.865 & 183.419 & 176.425 & -314.356 \\ -317.996 & -317.865 & 176.419 & 183.425 & -314.356 \\ 1059.44 & 1059.57 & -590.567 & -590.561 & 1062.2 \\ -321.472 & -321.341 & 172.943 & 172.949 & -317.832 \\ -335.658 & -317.865 & 176.419 & 176.425 & -314.356 \\ -317.996 & -335.527 & 176.419 & 176.425 & -314.356 \\ -320.12 & -319.989 & 160.223 & 177.607 & -316.454 \\ -315.662 & -315.531 & 175.119 & 157.67 & -312.051 \\ -317.996 & -317.865 & 176.419 & 176.425 & -331.53 \\ 655.31 & 655.441 & -339.391 & -339.384 & 647.041 \end{pmatrix}$$

$$K_{21} = \{\{1, 2\}, \{2, 4\}, \{1, 3, 4\}, \{1, 3, 5\}\}$$

$$V_{21} = \begin{pmatrix} 254.115 & -188.255 & 241.539 & -241.585 & 80.039 \\ -433.056 & 343.329 & -434.327 & 433.72 & -145.25 \\ 240.795 & -188.255 & 254.513 & -241.585 & 80.039 \\ -248.122 & 192.88 & -248.84 & 257.007 & -83.4206 \\ 240.795 & -188.255 & 241.539 & -241.585 & 86.5261 \\ 237.551 & -191.498 & 238.295 & -244.828 & 76.7955 \\ 195.431 & -175.627 & 225.243 & -225.358 & 74.6071 \\ 240.795 & -198.003 & 241.539 & -241.585 & 80.039 \\ 249.989 & -195.422 & 221.696 & -250.798 & 83.1128 \\ 240.795 & -188.255 & 241.539 & -256.207 & 80.039 \\ 249.989 & -195.422 & 250.76 & -250.798 & 68.5809 \\ -1469.08 & 1172.78 & -1473.49 & 1503.6 & -481.108 \end{pmatrix}$$

$$K_{22} = \{\{1, 3\}, \{1, 5\}, \{2, 3\}, \{2, 5\}, \{3, 4\}, \{3, 5\}, \{1, 2, 4\}\}$$

$$V_{22} = \begin{pmatrix} 4.02193 & -3.42061 & 1.4926 & -3.39513 & 1.46484 \\ 125.273 & 133.329 & -42.6107 & 124.034 & -41.4373 \\ -60.0612 & -60.1226 & 27.9902 & -59.567 & 20.3765 \\ 119.401 & 119.34 & -40.5975 & 126.189 & -39.4789 \\ -60.0612 & -60.1226 & 20.9337 & -59.567 & 27.3347 \\ -63.5403 & -63.6017 & 17.4546 & -63.0461 & 16.8973 \\ -77.6408 & -60.1226 & 20.9337 & -59.567 & 20.3765 \\ -60.0612 & -77.7021 & 20.9337 & -59.567 & 20.3765 \\ -72.9779 & -73.0393 & 7.9671 & -72.3629 & 24.6845 \\ -60.0612 & -60.1226 & 20.9337 & -76.9019 & 20.3765 \\ -57.7027 & -57.7641 & 20.125 & -57.2305 & 2.22176 \\ 263.411 & 263.35 & -75.556 & 260.981 & -73.1928 \end{pmatrix}$$

$$K_{23} = \{\{1, 2\}, \{2, 3\}, \{3, 4\}, \{1, 3, 5\}, \{1, 4, 5\}\}$$

$$V_{23} = \begin{pmatrix} 265.325 & -214.135 & -304.311 & 242.597 & 247.9 \\ -81.1629 & 76.0106 & 98.2991 & -76.8863 & -80.3138 \\ -822.953 & 693.536 & 1005.13 & -779.564 & -802.193 \\ 256.103 & -214.135 & -304.311 & 251.49 & 247.9 \\ 256.103 & -214.135 & -304.311 & 242.597 & 256.954 \\ 253.103 & -217.135 & -307.311 & 239.597 & 244.9 \\ -476.029 & 372.06 & 527.586 & -417.538 & -430.275 \\ 256.103 & -223.149 & -304.311 & 242.597 & 247.9 \\ 256.103 & -214.135 & -322.178 & 242.597 & 247.9 \\ -431.075 & 363.899 & 516.004 & -442.122 & -420.834 \\ 240.202 & -200.759 & -285.328 & 227.534 & 213.86 \\ 28.1764 & -7.92255 & -14.963 & 27.1027 & 26.302 \end{pmatrix}$$

$$K_{24} = \{\{1, 2\}, \{1, 3, 5\}, \{1, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{24} = \begin{pmatrix} 56.1499 & 11.122 & -55.267 & -55.2909 & -55.9211 \\ 46.9285 & 15.6086 & -55.267 & -55.2909 & -55.9211 \\ -55.1766 & -13.2753 & 76.6903 & 66.5966 & 67.2821 \\ -80.066 & -19.2225 & 96.3321 & 106.665 & 97.3144 \\ -122.911 & -29.4601 & 147.479 & 147.455 & 160.06 \\ 43.9285 & 8.12202 & -58.267 & -58.2909 & -58.9211 \\ 36.146 & 12.9289 & -64.294 & -64.3179 & -65.0454 \\ 55.1891 & 4.1787 & -65.128 & -65.1519 & -65.8885 \\ 46.9285 & 11.122 & -73.1339 & -55.2909 & -55.9211 \\ 46.9285 & 11.122 & -55.267 & -73.1578 & -55.9211 \\ 46.9285 & 11.122 & -55.267 & -55.2909 & -74.1115 \\ -120.974 & -23.3683 & 161.39 & 161.366 & 162.995 \end{pmatrix}$$

$$K_{25} = \{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{25} = \begin{pmatrix} 11.0017 & -25.0218 & -25.0637 & 22.787 & -18.2307 \\ -4.21996 & 30.5364 & 20.0867 & -15.9729 & 14.0036 \\ -19.8633 & 89.5009 & 100.369 & -75.5265 & 63.5306 \\ 5.96136 & -25.0218 & -25.0637 & 32.6685 & -18.2307 \\ -17.2761 & 78.0277 & 77.9858 & -65.6772 & 60.6992 \\ 2.64571 & -28.3374 & -28.3793 & 19.4714 & -21.5463 \\ -3.85311 & -33.1985 & -33.2404 & 29.8064 & -24.0682 \\ 5.96136 & -48.4762 & -25.0637 & 22.787 & -18.2307 \\ 5.96136 & -25.0218 & -48.5181 & 22.787 & -18.2307 \\ 5.08969 & -21.1563 & -21.1981 & -3.58616 & -15.4709 \\ 5.96136 & -25.0218 & -25.0637 & 22.787 & -29.8408 \\ 2.62988 & 33.1906 & 33.1488 & -12.3317 & 25.6155 \end{pmatrix}$$

$$K_{26} = \{\{1, 3\}, \{1, 4\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}\}$$

$$V_{26} = \begin{pmatrix} 71.2132 & 95.3924 & -73.8815 & -73.8293 & -72.8471 \\ -94.3085 & -126.861 & 109.969 & 110.022 & 106.133 \\ -85.8899 & -123.749 & 109.311 & 100.345 & 96.7122 \\ -85.8899 & -123.749 & 100.293 & 109.363 & 96.7122 \\ -85.8899 & -123.749 & 100.293 & 100.345 & 105.57 \\ -88.8779 & -126.737 & 97.3046 & 97.3568 & 93.7241 \\ -94.8944 & -123.749 & 100.293 & 100.345 & 96.7122 \\ -85.8899 & -142.089 & 100.293 & 100.345 & 96.7122 \\ 341.684 & 494.617 & -421.218 & -391.134 & -381.744 \\ 363.97 & 526.846 & -416.802 & -447.409 & -406.682 \\ -63.3116 & -91.096 & 74.3399 & 74.3921 & 53.1334 \\ -91.9151 & -135.076 & 119.807 & 119.859 & 115.864 \end{pmatrix}$$

$$K_{27} = \{\{1, 4\}, \{1, 5\}, \{2, 4\}, \{2, 5\}, \{1, 2, 3\}, \{3, 4, 5\}\}$$

$$V_{27} = \begin{pmatrix} 6.48544 & 3.01771 & 3.06053 & -1.5489 & -1.56343 \\ 0.322198 & 9.6191 & 0.778819 & 0.284651 & 0.270128 \\ -1.59461 & -1.94168 & 7.03887 & 2.47935 & 2.46482 \\ 0.28616 & 0.709525 & 0.727471 & 9.34395 & 0.31139 \\ 0.28616 & 0.709525 & 0.727471 & 0.325913 & 9.32943 \\ -2.70189 & -2.27852 & -2.26058 & -2.66213 & -2.67666 \\ -8.8003 & 0.709525 & 0.727471 & 0.325913 & 0.31139 \\ 0.28616 & -16.9805 & 0.727471 & 0.325913 & 0.31139 \\ 0.28616 & 0.709525 & -17.2816 & 0.325913 & 0.31139 \\ 2.47206 & 3.79085 & 3.84201 & -20.2483 & -2.19141 \\ -3.63752 & -4.82143 & -4.86309 & 4.81842 & -13.0932 \\ 6.30997 & 6.75633 & 6.77513 & 6.2293 & 6.21478 \end{pmatrix}$$

$$K_{28} = \{\{1, 2\}, \{4, 5\}, \{1, 3, 4\}, \{1, 3, 5\}, \{2, 3, 4\}\}$$

$$V_{28} = \begin{pmatrix} 6.97388 & -0.0289759 & 1.64704 & 1.60871 & 0.823824 \\ -0.0683773 & 4.64392 & 1.64704 & 1.60871 & 0.823824 \\ -0.853211 & -0.376161 & 17.9308 & 3.54902 & 2.05196 \\ 2.67713 & 1.18555 & -5.28295 & 8.65187 & -3.47245 \\ 0.357695 & 0.159504 & 0.571583 & 0.555346 & 7.09703 \\ -2.86167 & -2.82227 & -1.14626 & -1.18459 & -1.96947 \\ -10.9133 & 0.769144 & -2.90697 & -2.85175 & -1.99945 \\ -0.0594315 & -8.44135 & 1.62446 & 1.58659 & 0.809826 \\ -0.0683773 & -0.0289759 & -24.0833 & 1.60871 & 0.823824 \\ -0.0683773 & -0.0289759 & 1.64704 & -23.4069 & 0.823824 \\ -0.0683773 & -0.0289759 & 1.64704 & 1.60871 & -11.684 \\ 4.95238 & 4.99757 & 6.70439 & 6.66553 & 5.87122 \end{pmatrix}$$

$$K_{29} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}\}$$

$$V_{29} = \begin{pmatrix} 34.1476 & 41.797 & -31.5052 & -30.3263 & -31.572 \\ -131.106 & -179.569 & 150.343 & 151.522 & 150.277 \\ -97.2255 & -139.457 & 120.761 & 112.976 & 111.73 \\ -97.2255 & -139.457 & 111.797 & 121.94 & 111.73 \\ -97.2255 & -139.457 & 111.797 & 112.976 & 120.694 \\ -100.214 & -142.445 & 108.809 & 109.988 & 108.742 \\ -106.257 & -139.457 & 111.797 & 112.976 & 111.73 \\ -97.2255 & -157.685 & 111.797 & 112.976 & 111.73 \\ 124.392 & 179.455 & -164.465 & -139.161 & -140.406 \\ 628.102 & 904.302 & -713.415 & -750.509 & -713.482 \\ 95.8785 & 138.423 & -107.899 & -106.72 & -131.291 \\ -156.041 & -226.45 & 190.184 & 191.363 & 190.117 \end{pmatrix}$$

$$K_{30} = \{\{1, 2, 3\}, \{1, 2, 5\}, \{1, 3, 4\}, \{2, 3, 4\}\}$$

$$V_{30} = \begin{pmatrix} 15.2579 & 1.06723 & 0.16166 & 0.474187 & 0.0684705 \\ 0.59511 & 14.7823 & 0.347528 & 0.17907 & 0.150313 \\ 1.96718 & 1.96752 & 6.80697 & 1.03736 & -0.0877098 \\ -4.25804 & -4.2577 & 2.25955 & 4.1166 & 0.992225 \\ 1.96718 & 1.96752 & -0.193033 & 1.03736 & 4.55728 \\ -0.825005 & -0.824664 & -2.98522 & -1.75482 & -2.87989 \\ -23.5906 & 1.96752 & -0.193033 & 1.03736 & -0.0877098 \\ 1.96718 & -23.5903 & -0.193033 & 1.03736 & -0.0877098 \\ 3.55532 & 3.55566 & -13.4309 & 2.03082 & -0.363217 \\ 1.96718 & 1.96752 & -0.193033 & -11.5626 & -0.0877098 \\ -3.91799 & -3.91764 & 2.12558 & -2.64408 & -7.39771 \\ 5.31466 & 5.315 & 5.487 & 5.01142 & 5.22336 \end{pmatrix}$$

$$K_{31} = \{\{1, 3\}, \{1, 5\}, \{2, 3\}, \{1, 2, 4\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{31} = \begin{pmatrix} 24.3286 & 28.0839 & -21.5044 & 28.4233 & -22.0629 \\ 19.7188 & 37.5097 & -21.6273 & 28.5795 & -22.1891 \\ -5.93273 & -8.09669 & 16.1698 & -8.15056 & 7.48562 \\ -2.18429 & -2.78704 & 3.03779 & 6.34298 & 3.14926 \\ -5.93273 & -8.09669 & 7.25892 & -8.15056 & 16.5582 \\ -8.92078 & -11.0847 & 4.27087 & -11.1386 & 4.49758 \\ -14.9917 & -8.09669 & 7.25892 & -8.15056 & 7.48562 \\ -5.93273 & -25.8918 & 7.25892 & -8.15056 & 7.48562 \\ -11.6299 & -16.1667 & -3.96074 & -16.3083 & 14.0764 \\ -5.93273 & -8.09669 & 7.25892 & -26.2685 & 7.48562 \\ 0.157468 & 0.530037 & 0.400731 & 0.569915 & -17.8517 \\ 17.2528 & 22.1933 & -5.82242 & 22.402 & -6.12011 \end{pmatrix}$$

$$K_{32} = \{\{1, 2\}, \{1, 3, 4\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}\}$$



$$V_{32} = \begin{pmatrix} 54.6311 & -58.1618 & 70.5943 & 70.5996 & -55.1308 \\ -85.8738 & 110.515 & -122.575 & -122.57 & 95.985 \\ 172.814 & -204.188 & 260.114 & 247.459 & -193.487 \\ 168.273 & -198.825 & 240.958 & 253.56 & -188.406 \\ -85.8738 & 101.331 & -122.575 & -122.57 & 104.843 \\ -88.8619 & 98.3429 & -125.563 & -125.558 & 92.997 \\ -94.8784 & 101.331 & -122.575 & -122.57 & 95.985 \\ -87.705 & 85.2062 & -125.195 & -125.189 & 98.0341 \\ -85.8738 & 101.331 & -140.584 & -122.57 & 95.985 \\ -85.8738 & 101.331 & -122.575 & -140.579 & 95.985 \\ -91.181 & 107.599 & -130.167 & -130.161 & 84.3803 \\ 310.404 & -345.813 & 440.144 & 440.149 & -327.171 \end{pmatrix}$$

$$K_{33} = \{\{1, 2, 3\}, \{1, 4, 5\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{33} = \begin{pmatrix} 115.712 & 135.116 & 135.171 & -226.931 & -226.953 \\ 322.146 & 408.97 & 397.833 & -667.056 & -667.077 \\ 244.518 & 301.934 & 312.518 & -506.457 & -506.479 \\ -169.981 & -209.828 & -209.772 & 365.038 & 351.045 \\ -169.981 & -209.828 & -209.772 & 351.066 & 365.017 \\ -172.776 & -212.622 & -212.567 & 348.272 & 348.25 \\ -178.454 & -209.828 & -209.772 & 351.066 & 351.045 \\ -169.981 & -222.418 & -209.772 & 351.066 & 351.045 \\ -169.981 & -209.828 & -222.363 & 351.066 & 351.045 \\ -166.079 & -205.01 & -204.954 & 317.692 & 342.971 \\ -174.545 & -215.462 & -215.407 & 360.508 & 335.446 \\ 689.402 & 848.802 & 848.857 & -1395.33 & -1395.35 \end{pmatrix}$$

$$K_{34} = \{\{1, 2\}, \{4, 5\}, \{1, 3, 4\}, \{1, 3, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{34} = \begin{pmatrix} 5.53558 & 0.0188572 & 1.02983 & 1.01223 & 1.01222 \\ 0.0190268 & 5.53541 & 1.02983 & 1.01223 & 1.01222 \\ -0.765737 & -0.765907 & 14.7931 & 3.55223 & 3.55222 \\ 1.07912 & 1.07895 & -2.45448 & 8.45719 & -2.41892 \\ 1.07533 & 1.07516 & -2.44203 & -2.40665 & 8.46958 \\ -2.72412 & -2.72428 & -1.71332 & -1.73091 & -1.73092 \\ -9.40777 & 0.242969 & 0.29322 & 0.286867 & 0.286856 \\ 0.309754 & -9.33929 & 0.0742685 & 0.0712561 & 0.0712452 \\ 0.0190268 & 0.0188572 & -18.5012 & 1.01223 & 1.01222 \\ 0.0190268 & 0.0188572 & 1.02983 & -18.0925 & 1.01222 \\ 0.0190268 & 0.0188572 & 1.02983 & 1.01223 & -18.0925 \\ 4.82173 & 4.82156 & 5.83114 & 5.81356 & 5.81355 \end{pmatrix}$$

$$K_{35} = \{\{1, 2, 3\}, \{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 5\}, \{2, 3, 4\}\}$$

$$V_{35} = \begin{pmatrix} 9.50806 & 1.67616 & -1.49431 & -1.02625 & 0.556224 \\ 2.22891 & 10.5195 & 2.17178 & 1.18027 & -0.163211 \\ -0.202 & 0.937269 & 10.7688 & -0.267898 & 0.312217 \\ -0.839419 & 1.31482 & -0.861065 & 4.84936 & 0.436881 \\ 2.22891 & -0.502588 & 2.17178 & 1.18027 & 5.28773 \\ -0.511495 & -3.243 & -0.56863 & -1.56014 & -2.90362 \\ -17.2804 & -0.507726 & 2.16664 & 1.17855 & -0.164893 \\ -1.97813 & -17.0186 & -1.98651 & -1.3245 & 0.656761 \\ 2.22337 & -0.507973 & -16.8985 & 1.17847 & -0.164974 \\ 2.22891 & -0.502588 & 2.17178 & -8.45266 & -0.163211 \\ -3.00832 & 2.59949 & -3.00488 & -1.93971 & -8.62542 \\ 5.40162 & 5.23526 & 5.36312 & 5.00424 & 4.93551 \end{pmatrix}$$

$$K_{36} = \{\{1, 2, 3\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{36} = \begin{pmatrix} 1092.47 & 1413.92 & 1413.68 & -1602.56 & -1592.26 \\ 199.492 & 273.983 & 261.758 & -298.046 & -296.09 \\ 536.997 & 703.763 & 718.325 & -798.336 & -793.181 \\ -400.995 & -524.004 & -524.237 & 606.266 & 588.332 \\ -400.995 & -524.004 & -524.237 & 592.067 & 602.138 \\ -403.787 & -526.796 & -527.03 & 589.275 & 585.539 \\ -409.434 & -524.004 & -524.237 & 592.067 & 588.332 \\ -400.995 & -536.604 & -524.237 & 592.067 & 588.332 \\ -400.995 & -524.004 & -536.837 & 592.067 & 588.332 \\ -401.525 & -524.701 & -524.935 & 568.177 & 589.079 \\ -400.444 & -523.283 & -523.516 & 591.25 & 562.652 \\ 1390.21 & 1815.73 & 1815.5 & -2024.29 & -2011.2 \end{pmatrix}$$

$$K_{37} = \{\{1, 3\}, \{1, 2, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{37} = \begin{pmatrix} 298.925 & 382.06 & -164.33 & -432.622 & 648.475 \\ 443.365 & 592.197 & -249.58 & -657.211 & 984.63 \\ -136.371 & -178.455 & 83.6149 & 202.142 & -301.609 \\ -136.371 & -178.455 & 76.6149 & 216.341 & -301.609 \\ 27.7198 & 36.3284 & -15.7127 & -41.0926 & 78.9498 \\ -139.163 & -181.247 & 73.8227 & 199.35 & -304.401 \\ -144.81 & -178.455 & 76.6149 & 202.142 & -301.609 \\ -136.371 & -191.055 & 76.6149 & 202.142 & -301.609 \\ -133.804 & -175.095 & 62.5319 & 198.337 & -295.913 \\ -141.399 & -185.04 & 79.4315 & 185.053 & -312.78 \\ -136.371 & -178.455 & 76.6149 & 202.142 & -326.461 \\ 334.651 & 435.673 & -176.238 & -476.724 & 733.936 \end{pmatrix}$$

$$K_{38} = \{\{1, 2, 3\}, \{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}\}$$

$$V_{38} = \begin{pmatrix} 7.4096 & 1.00897 & -0.701412 & -0.701436 & 0.985256 \\ 1.55954 & 7.41837 & 1.5392 & 1.53917 & -0.583456 \\ -0.656427 & 0.974796 & 7.33103 & -0.653772 & 0.951885 \\ -0.635874 & 0.960212 & -0.633408 & 7.35164 & 0.937644 \\ 1.55954 & -0.597664 & 1.5392 & 1.53917 & 7.30609 \\ -1.09827 & -3.25547 & -1.11861 & -1.11863 & -3.24126 \\ -12.0037 & -0.597664 & 1.5392 & 1.53917 & -0.583456 \\ -2.02238 & -11.3176 & -2.00551 & -2.00554 & 1.89829 \\ 1.55954 & -0.597664 & -11.8066 & 1.53917 & -0.583456 \\ 1.55954 & -0.597664 & 1.5392 & -11.8066 & -0.583456 \\ -1.95222 & 1.89429 & -1.93608 & -1.9361 & -11.2044 \\ 4.72113 & 4.7071 & 4.71381 & 4.71378 & 4.70031 \end{pmatrix}$$

$$K_{39} = \{\{1, 2, 3\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{39} = \begin{pmatrix} 933.308 & 1143.6 & 1143.77 & -1923.37 & -1923.39 \\ 515.976 & 656.038 & 641.132 & -1079.2 & -1079.22 \\ 268.514 & 333.795 & 346.926 & -563.337 & -563.36 \\ -421.38 & -522.527 & -522.35 & 888.852 & 874.8 \\ -421.38 & -522.527 & -522.35 & 874.823 & 888.828 \\ -424.17 & -525.317 & -525.14 & 872.034 & 872.01 \\ -429.786 & -522.527 & -522.35 & 874.823 & 874.8 \\ -421.38 & -535.137 & -522.35 & 874.823 & 874.8 \\ -421.38 & -522.527 & -534.959 & 874.823 & 874.8 \\ -416.62 & -516.619 & -516.442 & 839.535 & 864.877 \\ -425.832 & -528.054 & -527.876 & 884.105 & 859. \\ 1664.13 & 2061.81 & 2061.98 & -3417.92 & -3417.94 \end{pmatrix}$$

$$K_{40} = \{\{1, 2\}, \{1, 3, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}\}$$

$$V_{40} = \begin{pmatrix} 4.43867 & 0.153388 & 0.610827 & 0.609532 & 0.609784 \\ 0.076251 & 6.64041 & 0.610827 & 0.609532 & 0.609784 \\ 0.241954 & 0.518261 & 12.5713 & -0.393129 & -0.392877 \\ 0.00703773 & 0.000982021 & 1.02963 & 14.007 & 1.02859 \\ 0.0528557 & 0.101872 & 0.752391 & 0.751096 & 13.7269 \\ -2.51856 & -2.44142 & -1.98398 & -1.98528 & -1.98503 \\ -8.1284 & -2.43629 & 7.72719 & 7.72589 & 7.72615 \\ 1.86577 & -6.20069 & -10.2175 & -10.2188 & -10.2185 \\ 0.076251 & 0.153388 & -20.1679 & 0.609532 & 0.609784 \\ 0.076251 & 0.153388 & 0.610827 & -20.1692 & 0.609784 \\ 0.076251 & 0.153388 & 0.610827 & 0.609532 & -20.169 \\ 3.73567 & 3.20333 & 7.84558 & 7.84429 & 7.84454 \end{pmatrix}$$

$$K_{41} = \{\{1, 2, 3\}, \{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{41} = \begin{pmatrix} 8.14428 & 0.450823 & -0.00830383 & -0.0118652 & 0.439063 \\ 0.803263 & 8.08376 & 0.817519 & 0.804114 & 0.0335267 \\ -0.274423 & 0.576027 & 7.77714 & -0.257832 & 0.561307 \\ -0.112809 & 0.494962 & -0.0960629 & 7.81057 & 0.482159 \\ 0.803263 & 0.0354694 & 0.817519 & 0.804114 & 7.95432 \\ -1.85102 & -2.61881 & -1.83676 & -1.85017 & -2.62075 \\ -12.5204 & 0.0295151 & 0.811565 & 0.7983 & 0.0277131 \\ -0.305246 & -12.7557 & -0.287977 & -0.288205 & 0.576402 \\ 0.803263 & 0.0354694 & -12.5535 & 0.804114 & 0.0335267 \\ 0.803263 & 0.0354694 & 0.817519 & -12.355 & 0.0335267 \\ -0.92873 & 0.904221 & -0.909767 & -0.902583 & -12.2409 \\ 4.63526 & 4.72881 & 4.65107 & 4.64448 & 4.72006 \end{pmatrix}$$

$$K_{42} = \{\{1, 2, 3\}, \{1, 4, 5\}, \{2, 3, 4, 5\}\}$$

$$V_{42} = \begin{pmatrix} 171.906 & 209.455 & 331.631 & -329.068 & -329.066 \\ 163.073 & 214.943 & 325.989 & -323.459 & -323.457 \\ -5.58261 & -6.95111 & 3.5364 & 11.057 & 11.0593 \\ -63.583 & -80.1458 & -126.195 & 139.202 & 126.099 \\ -63.583 & -80.1458 & -126.195 & 126.097 & 139.204 \\ -66.1768 & -82.7396 & -128.789 & 123.503 & 123.506 \\ -70.514 & -80.1458 & -126.195 & 126.097 & 126.099 \\ -63.583 & -90.6331 & -126.195 & 126.097 & 126.099 \\ -63.583 & -80.1458 & -146.634 & 126.097 & 126.099 \\ -65.0669 & -82.0184 & -129.156 & 108.118 & 129.043 \\ -64.2783 & -81.0232 & -127.582 & 127.476 & 106.528 \\ 190.972 & 239.551 & 375.786 & -361.217 & -361.214 \end{pmatrix}$$

$$K_{43} = \{\{1, 2, 3\}, \{1, 2, 4\}, \{1, 3, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}\}$$

$$V_{43} = \begin{pmatrix} 7.89608 & -0.188734 & 0.529665 & 0.529651 & -0.181154 \\ -0.0332973 & 8.0532 & 0.452759 & 0.452745 & -0.0270265 \\ 0.771675 & 0.771506 & 8.02218 & 0.0540336 & 0.772035 \\ 0.771675 & 0.771506 & 0.0540478 & 8.02216 & 0.772035 \\ -0.0622028 & -0.0623716 & 0.467076 & 0.467062 & 7.9017 \\ -1.88437 & -1.88454 & -2.60199 & -2.60201 & -1.88401 \\ -12.5637 & 0.76851 & 0.051123 & 0.0511088 & 0.76911 \\ 0.768679 & -12.5638 & 0.051123 & 0.0511088 & 0.76911 \\ -0.55635 & -0.556519 & -12.5117 & 0.711819 & -0.546239 \\ -0.564304 & -0.564473 & 0.715772 & -12.5076 & -0.554135 \\ 0.771675 & 0.771506 & 0.0540478 & 0.0540336 & -12.4799 \\ 4.68441 & 4.68424 & 4.71594 & 4.71593 & 4.68845 \end{pmatrix}$$

$$K_{44} = \{\{1, 2, 3\}, \{1, 2, 5\}, \{1, 3, 4\}, \{2, 3, 4, 5\}\}$$

$$V_{44} = \begin{pmatrix} 6.69384 & 2.82058 & -1.70722 & 2.77951 & -1.66204 \\ -0.186562 & 10.0735 & 0.685648 & -0.138061 & 0.668253 \\ 0.29245 & 0.62419 & 10.0878 & 0.615357 & 0.06649 \\ -2.39833 & -3.67106 & 3.53881 & 6.34284 & 3.4468 \\ 0.29245 & 0.62419 & 0.0677258 & 0.615357 & 9.88967 \\ -2.20007 & -1.86833 & -2.4248 & -1.87717 & -2.42603 \\ -7.21632 & 0.62419 & 0.0677258 & 0.615357 & 0.06649 \\ 0.29245 & -14.7005 & 0.0677258 & 0.615357 & 0.06649 \\ -0.0866553 & 0.0190288 & -14.448 & 0.0190782 & 0.542744 \\ 0.29245 & 0.62419 & 0.0677258 & -14.4022 & 0.06649 \\ 0.11137 & 0.335134 & 0.301318 & 0.330543 & -14.4226 \\ 4.11293 & 4.49482 & 3.69561 & 4.48401 & 3.69721 \end{pmatrix}$$

$$K_{45} = \{\{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 4\}, \{1, 3, 5\}, \{2, 3, 4, 5\}\}$$

$$V_{45} = \begin{pmatrix} 4.45361 & -0.69808 & -0.699628 & 1.12484 & 1.12425 \\ -1.58629 & 7.69875 & -2.36168 & 2.46014 & 2.45955 \\ -0.774742 & -1.07427 & 9.00163 & 1.42708 & 1.42649 \\ 1.14783 & 1.97194 & 1.9704 & 8.90036 & -1.02086 \\ 1.14783 & 1.97194 & 1.9704 & -1.02027 & 8.89977 \\ -1.3447 & -0.520578 & -0.522126 & -3.51279 & -3.51338 \\ -6.36095 & 1.97194 & 1.9704 & -1.02027 & -1.02086 \\ 1.14783 & -13.1976 & 1.9704 & -1.02027 & -1.02086 \\ 1.14783 & 1.97194 & -13.1991 & -1.02027 & -1.02086 \\ -0.948126 & -1.34899 & -1.35054 & -13.1503 & 1.64719 \\ -1.15903 & -1.68316 & -1.68471 & 1.91626 & -12.8753 \\ 3.12892 & 2.93616 & 2.93461 & 4.9155 & 4.91491 \end{pmatrix}$$

$$K_{46} = \{\{1, 3\}, \{2, 3\}, \{4, 5\}\}$$

$$V_{46} = \begin{pmatrix} 7.47848 & -0.762417 & -1.35552 & 1.13187 & 1.13163 \\ 2.26709 & 4.807 & -0.316618 & 0.422458 & 0.422275 \\ -1.64503 & 4.83613 & 10.5993 & -0.452523 & -0.453394 \\ 2.05558 & -1.60284 & 0.169582 & 7.32402 & 0.26732 \\ 2.05558 & -1.60284 & 0.169582 & 0.267565 & 7.32377 \\ -1.44793 & -5.10634 & -3.33392 & -3.23594 & -3.23618 \\ -21.1278 & 12.5785 & 12.8058 & -3.75808 & -3.75991 \\ -1.27542 & -17.2167 & -3.16141 & 2.15531 & 2.15507 \\ 2.05558 & -1.60284 & -17.3361 & 0.267565 & 0.26732 \\ -1.6726 & -0.0628468 & -4.3951 & -14.9663 & 2.70965 \\ -1.14246 & -0.917688 & -4.77993 & 2.7697 & -14.9016 \\ 12.3989 & 6.65286 & 10.9344 & 8.07434 & 8.07406 \end{pmatrix}$$

$$K_{47} = \{\{1, 5\}, \{2, 3\}, \{2, 4\}, \{3, 4\}\}$$

$$V_{47} = \begin{pmatrix} 6.69082 & -1.62542 & -0.364053 & -0.40114 & 3.66906 \\ 0.585498 & 8.80358 & 0.295787 & 0.259346 & 1.74219 \\ 0.74061 & -0.61317 & 8.62701 & 0.572976 & 0.80664 \\ 0.74061 & -0.61317 & 0.610974 & 8.58901 & 0.80664 \\ 1.09532 & -3.81764 & 1.43407 & 1.39209 & 6.24437 \\ -3.23553 & -4.58931 & -3.36517 & -3.40317 & -3.1695 \\ -12.1324 & 6.33581 & -1.11849 & -1.14795 & 5.94009 \\ -1.7787 & -23.5168 & 1.876 & 1.83681 & -2.91957 \\ -7.26083 & 29.1998 & -27.8084 & -3.87923 & 14.1684 \\ -4.84653 & -13.9012 & 8.79271 & -14.761 & -23.3765 \\ 0.740541 & -0.622196 & 0.602232 & 0.564234 & -22.4997 \\ 18.6606 & 4.95971 & 10.4174 & 10.378 & 18.5879 \end{pmatrix}$$

$$K_{48} = \{\{1, 5\}, \{2, 3\}, \{2, 5\}, \{3, 4\}\}$$

$$V_{48} = \begin{pmatrix} 5.54874 & -5.35654 & 1.61711 & -5.28423 & 4.57008 \\ 1.80171 & 14.0903 & -2.30209 & 5.81797 & 1.38486 \\ -0.401461 & -4.34429 & 10.6082 & -4.31011 & 1.70767 \\ -0.184388 & -3.33415 & 2.10992 & 4.70725 & 1.67586 \\ -0.441873 & -4.32317 & 2.61248 & -4.28979 & 9.53727 \\ -4.3776 & -8.32043 & -1.38401 & -8.28626 & -2.26848 \\ -13.7289 & -10.7094 & 5.63069 & -10.5981 & 1.90808 \\ -2.92077 & -27.2479 & 3.85716 & -3.04628 & -2.01854 \\ -4.61489 & -0.121031 & -19.6872 & -0.199429 & -5.16082 \\ -8.15674 & -0.297607 & 6.48998 & -24.0531 & -9.75934 \\ 8.79124 & 38.4248 & -17.838 & 37.9406 & -23.3697 \\ 18.6849 & 11.5395 & 8.28584 & 11.6015 & 21.793 \end{pmatrix}$$

$$K_{49} = \{\{1\}, \{2, 4\}, \{2, 5\}, \{3, 4\}, \{3, 5\}\}$$

$$V_{49} = \begin{pmatrix} 4.55731 & -2.057 & 2.06977 & -1.53242 & 1.34852 \\ -0.25091 & 29.5054 & -12.1173 & 26.6408 & -0.145413 \\ 0.0437732 & -2.057 & 11.1791 & -1.53242 & 1.34852 \\ -0.0256355 & 4.2208 & -1.23106 & 16.8321 & -1.8377 \\ 0.0388956 & -1.60195 & 1.83108 & -1.32776 & 10.5397 \\ -4.42939 & -6.53016 & -2.4034 & -6.00558 & -3.12464 \\ -15.5891 & -13.065 & 7.83887 & -2.21901 & -8.80966 \\ 0.0437732 & -17.824 & 2.06977 & -1.53242 & 1.34852 \\ 0.0364211 & -1.36175 & -30.1177 & -1.531 & 2.03192 \\ 0.0994362 & -7.24993 & 4.79368 & -35.0896 & -1.43705 \\ 0.218896 & -17.8963 & 10.398 & -25.2357 & -21.6567 \\ 15.2566 & 35.9169 & 5.68923 & 32.5331 & 20.394 \end{pmatrix}$$

$$K_{50} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 4\}\}$$

$$V_{50} = \begin{pmatrix} 10.7792 & 3.39482 & -27.2559 & -27.2351 & 15.4113 \\ 3.85024 & 10.5714 & -27.3527 & -27.3319 & 15.3172 \\ -1.14525 & -0.967245 & 30.3232 & 23.0242 & -12.1493 \\ 5.19425 & 4.90978 & -27.331 & -20.2909 & 14.0993 \\ 5.2987 & 5.00662 & -28.1603 & -28.1394 & 21.4488 \\ 1.81612 & 1.52403 & -31.6429 & -31.622 & 11.0492 \\ -38.1938 & -16.2255 & 153.648 & 153.705 & -80.2973 \\ -16.4227 & -35.2864 & 144.269 & 144.324 & -75.4053 \\ 1.42633 & 1.1587 & -43.4334 & -25.9805 & 16.6315 \\ 1.7964 & 1.52643 & -26.2076 & -43.6252 & 16.4308 \\ 1.53468 & 1.2758 & -25.0166 & -24.9955 & -1.30258 \\ 24.0658 & 23.1116 & -91.8392 & -91.8325 & 58.7664 \end{pmatrix}$$

$$K_{51} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 5\}, \{3, 4\}\}$$

$$V_{51} = \begin{pmatrix} 6.72614 & 0.762682 & 0.446092 & 1.5539 & 0.439268 \\ -0.378003 & 6.08518 & 1.13507 & 0.520717 & 1.11432 \\ 0.635686 & 1.76461 & 6.8882 & 0.996008 & -0.103328 \\ 0.789872 & 1.05915 & 0.137695 & 7.39606 & 0.141771 \\ 0.635686 & 1.76461 & -0.111803 & 0.996008 & 6.80002 \\ -2.83998 & -1.71106 & -3.58747 & -2.47966 & -3.579 \\ -16.0529 & -2.46954 & 1.38567 & -2.58592 & 1.36775 \\ 0.635686 & -15.8972 & -0.111803 & 0.996008 & -0.103328 \\ -0.968529 & -2.88571 & -15.3801 & 0.0787883 & 1.92981 \\ -2.57355 & -1.44462 & 1.67517 & -14.5765 & 1.63464 \\ 8.04817 & 2.08966 & -1.4744 & -7.34391 & -18.6227 \\ 5.34177 & 10.8822 & 8.99767 & 14.4485 & 8.98073 \end{pmatrix}$$

$$K_{52} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}\}$$

$$V_{52} = \begin{pmatrix} 6.90235 & -0.190269 & 1.45305 & 1.45007 & 0.356462 \\ -0.516773 & 6.57309 & 1.63499 & 1.63201 & 0.533409 \\ 1.06175 & 1.06122 & 3.88887 & -3.08803 & 2.14885 \\ 0.927041 & 0.926666 & -0.940196 & 6.04699 & 0.889934 \\ 0.811895 & 0.811658 & 0.895154 & 0.892178 & 6.71722 \\ -2.66378 & -2.66401 & -2.58052 & -2.58349 & -3.6618 \\ -17.3132 & 0.438317 & 6.85306 & 6.84654 & -3.67926 \\ 0.462065 & -17.2833 & 6.47119 & 6.4649 & -3.45537 \\ -1.34211 & -1.34234 & -15.283 & 2.09157 & 0.980371 \\ -2.39734 & -2.39757 & 2.68213 & -14.6803 & 1.55183 \\ 7.65482 & 7.6537 & -14.3079 & -14.3039 & -13.6744 \\ 6.41328 & 6.41289 & 9.23324 & 9.23146 & 11.2927 \end{pmatrix}$$

$$K_{53} = \{\{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{3, 4\}, \{3, 5\}\}$$

$$V_{53} = \begin{pmatrix} 33.9569 & 24.6191 & -214.154 & 117.226 & -212.593 \\ 27.0279 & 31.7957 & -214.25 & 117.129 & -212.687 \\ -43.5049 & -40.2033 & 399.899 & -211.591 & 386.942 \\ 28.4764 & 26.2309 & -215.058 & 123.336 & -213.472 \\ 11.2918 & 10.3706 & -70.8147 & 38.0368 & -62.332 \\ 24.9938 & 22.7483 & -218.541 & 112.839 & -216.955 \\ -133.345 & -91.2594 & 853.472 & -463.6 & 848.373 \\ -77.0064 & -102.325 & 670.339 & -364.208 & 666.386 \\ 24.604 & 22.383 & -230.331 & 118.481 & -211.373 \\ 32.9392 & 30.1162 & -278.381 & 137.094 & -276.438 \\ 24.8575 & 22.6349 & -213.04 & 118.339 & -228.706 \\ 45.7087 & 42.8891 & -269.14 & 156.918 & -267.145 \end{pmatrix}$$

$$K_{54} = \{\{1, 3\}, \{2, 3\}, \{2, 4\}, \{1, 4, 5\}\}$$

$$V_{54} = \begin{pmatrix} 8.06751 & -3.99711 & -0.870566 & 4.11448 & 3.95534 \\ -7.13982 & 7.442 & 5.35431 & -1.029 & -1.01708 \\ 2.92778 & 1.30625 & 4.77209 & -0.13782 & -0.167698 \\ 4.59065 & 0.153766 & -1.69694 & 10.8288 & 0.726896 \\ 4.59065 & 0.153766 & -1.69694 & 0.788593 & 10.5694 \\ 1.26618 & -3.1707 & -5.0214 & -2.53587 & -2.59757 \\ -25.074 & 4.16933 & 3.50298 & -2.44594 & -2.39657 \\ 4.59065 & -11.5709 & -1.69694 & 0.788593 & 0.726896 \\ 3.9281 & -0.254929 & -13.2193 & 1.11606 & 1.04477 \\ -6.30745 & 7.33766 & 7.86148 & -28.466 & -4.85555 \\ 4.19118 & -8.88401 & -6.84967 & 8.03585 & -14.866 \\ 4.36856 & 7.31489 & 9.56084 & 8.94227 & 8.87714 \end{pmatrix}$$

$$K_{55} = \{\{1, 2\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{3, 4, 5\}\}$$

$$V_{55} = \begin{pmatrix} 122.201 & 89.8884 & -93.4349 & -93.5845 & -37.848 \\ 179.052 & 145.14 & -143.777 & -144. & -60.8092 \\ -61.7627 & -47.0925 & 60.4669 & 50.3997 & 19.7893 \\ -61.7627 & -47.0925 & 50.3455 & 60.5212 & 19.7893 \\ -59.1522 & -47.6223 & 48.2402 & 48.2935 & 33.8983 \\ -65.0916 & -50.4214 & 47.0166 & 47.0708 & 16.4605 \\ -73.3699 & -47.0925 & 50.3455 & 50.3997 & 19.7893 \\ -63.6389 & -58.4142 & 51.8586 & 51.9135 & 16.7969 \\ -57.0951 & -44.4994 & 23.1644 & 46.6182 & 20.2261 \\ -69.4429 & -55.2204 & 56.5222 & 33.3747 & 26.6624 \\ -72.2488 & -55.2072 & 58.7946 & 58.861 & 0.353678 \\ 282.312 & 217.634 & -209.542 & -209.869 & -75.1087 \end{pmatrix}$$

$$K_{56} = \{\{2, 5\}, \{1, 3, 4\}, \{2, 3, 4\}\}$$

$$V_{56} = \begin{pmatrix} 67.1608 & -49.2956 & 99.7335 & 99.7457 & -12.1231 \\ -24.5209 & 27.1993 & -35.3795 & -35.3731 & 5.00363 \\ 57.2358 & -41.4856 & 98.9932 & 88.3182 & -11.1846 \\ 37.3726 & -25.7428 & 56.7052 & 67.2389 & -7.23497 \\ -20.1712 & 19.8645 & -34.8079 & -34.7837 & 9.18716 \\ -23.4913 & 16.5445 & -38.1279 & -38.1038 & 0.887024 \\ -31.8971 & 19.8645 & -34.8079 & -34.7837 & 4.20708 \\ -29.3021 & 4.33707 & -49.3426 & -49.3185 & 6.01567 \\ -24.3787 & 17.1324 & -58.5714 & -35.3538 & 4.97759 \\ -27.8521 & 14.877 & -35.8173 & -59.0288 & 5.61369 \\ -30.6343 & 21.5674 & -44.7801 & -44.7745 & -5.32364 \\ 50.4787 & -24.8627 & 76.2027 & 76.217 & -0.025547 \end{pmatrix}$$

$$K_{57} = \{\{1, 3\}, \{1, 4\}, \{2, 4\}, \{3, 4\}, \{3, 5\}, \{1, 2, 5\}\}$$

$$V_{57} = \begin{pmatrix} 3.289 & -4.29286 & 1.64764 & 1.74703 & -4.11995 \\ 125.169 & 133.206 & -42.589 & -41.3975 & 123.932 \\ -59.9923 & -60.0405 & 27.9756 & 20.35 & -59.4987 \\ -60.7941 & -60.9949 & 21.0887 & 27.6169 & -60.2918 \\ 118.668 & 118.467 & -40.4425 & -39.1968 & 125.464 \\ -64.2733 & -64.474 & 17.6096 & 17.1795 & -63.7709 \\ -82.6176 & -66.0463 & 21.9865 & 22.2924 & -64.4893 \\ -60.7941 & -78.5744 & 21.0887 & 20.6587 & -60.2918 \\ -73.7108 & -73.9115 & 8.12214 & 24.9667 & -73.0877 \\ -46.8654 & -44.8656 & 17.8327 & -1.95086 & -46.5126 \\ -61.7832 & -62.172 & 21.298 & 21.0394 & -78.6047 \\ 263.704 & 263.698 & -75.6182 & -73.3055 & 261.271 \end{pmatrix}$$

$$K_{58} = \{\{1, 2\}, \{1, 5\}, \{2, 5\}, \{1, 3, 4\}, \{2, 3, 4\}\}$$

$$V_{58} = \begin{pmatrix} 52.9852 & -26.513 & 43.0541 & 43.0852 & -23.4055 \\ 28.2022 & -0.837416 & 40.4806 & 40.4387 & -19.0101 \\ 108.224 & -60.9318 & 116.335 & 108.362 & -58.428 \\ 42.2384 & -26.373 & 37.5452 & 45.3195 & -20.9346 \\ -49.9047 & 27.9486 & -51.4705 & -51.4394 & 35.0131 \\ -53.3804 & 24.4729 & -54.9462 & -54.9151 & 24.6341 \\ -124.936 & 54.3151 & -119.02 & -118.936 & 62.7253 \\ -48.515 & 9.46696 & -50.0896 & -50.0585 & 27.3572 \\ -49.9047 & 27.9486 & -68.8851 & -51.4394 & 28.1098 \\ -49.9047 & 27.9486 & -51.4705 & -68.8539 & 28.1098 \\ -3.64944 & 7.86117 & 4.87956 & 4.85781 & -17.4417 \\ 148.544 & -65.3067 & 153.587 & 153.579 & -66.7294 \end{pmatrix}$$

$$K_{59} = \{\{2, 3\}, \{2, 4\}, \{1, 2, 5\}, \{1, 3, 4\}\}$$

$$V_{59} = \begin{pmatrix} -265278. & -374320. & 280804. & 280943. & -377728. \\ 69025.1 & 97197.6 & -72811.6 & -72847.5 & 98060.2 \\ -34759.7 & -48826. & 36533.3 & 36542.9 & -49259.3 \\ -14436.4 & -20183.7 & 15053.3 & 15068.9 & -20357.9 \\ 69778.1 & 97939. & -73230.8 & -73266.8 & 98820.1 \\ 68397.1 & 96558.1 & -72467.3 & -72503.3 & 97440. \\ 68383. & 96561.6 & -72463.8 & -72499.8 & 97443.5 \\ 67144.9 & 94774.2 & -71137.2 & -71172.5 & 95657.8 \\ 68398.5 & 96559.5 & -72480. & -72498.6 & 97441.4 \\ 68403. & 96563.9 & -72465.1 & -72518.6 & 97445.8 \\ -72058. & -101392. & 75930.5 & 75968.1 & -102323. \\ -92997.2 & -131433. & 98734.8 & 98784. & -132641. \end{pmatrix}$$

$$K_{60} = \{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{1, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{60} = \begin{pmatrix} 11.3331 & -25.2332 & -25.281 & 22.4599 & -17.8318 \\ -3.80135 & 30.2695 & 19.8123 & -16.3861 & 14.5075 \\ -19.4447 & 89.2341 & 100.095 & -75.9397 & 64.0345 \\ 6.37997 & -25.2886 & -25.3381 & 32.2553 & -17.7268 \\ -16.2862 & 77.4045 & 77.3444 & -66.6622 & 61.8995 \\ 3.06432 & -28.6043 & -28.6537 & 19.0583 & -21.0424 \\ -3.4345 & -33.4653 & -33.5147 & 29.3933 & -23.5644 \\ 4.71674 & -47.6808 & -24.2498 & 24.0141 & -19.7307 \\ 5.95844 & -25.0207 & -48.5153 & 22.7896 & -18.2347 \\ 2.2118 & -19.3295 & -19.317 & -0.73649 & -18.9406 \\ 6.37997 & -25.2886 & -25.3381 & 22.3739 & -29.337 \\ 2.92246 & 33.003 & 32.9559 & -12.6199 & 25.9668 \end{pmatrix}$$

$$K_{61} = \{\{2, 3\}, \{2, 5\}, \{3, 4\}, \{1, 2, 4\}, \{1, 3, 5\}\}$$

$$V_{61} = \begin{pmatrix} 5402.33 & 370.111 & 3317.98 & 393.901 & 3319.54 \\ -5191.31 & -224.866 & -3318.36 & -259.429 & -3318.89 \\ 2031.27 & 78.3979 & 1321.45 & 87.7294 & 1313.08 \\ -5197.19 & -238.855 & -3316.35 & -257.275 & -3316.93 \\ 9738.42 & 595.178 & 6065.65 & 639.929 & 6077.29 \\ -5380.13 & -421.796 & -3258.3 & -446.509 & -3260.55 \\ -5394.23 & -418.317 & -3254.82 & -443.03 & -3257.07 \\ 21220.2 & 1336.4 & 13145.7 & 1462.57 & 13151.3 \\ -5389.56 & -431.234 & -3267.78 & -455.826 & -3252.76 \\ -3991.35 & -325.431 & -2400.6 & -361.681 & -2402.44 \\ -5374.29 & -415.959 & -3255.63 & -440.694 & -3275.23 \\ -2474.13 & 96.368 & -1778.91 & 80.3163 & -1777.32 \end{pmatrix}$$

$$K_{62} = \{\{2, 4\}, \{1, 2, 3\}, \{1, 2, 5\}, \{1, 3, 4\}\}$$

$$V_{62} = \begin{pmatrix} 373.999 & -236.562 & -252.296 & -130.823 & 17.8135 \\ 220.479 & -129.562 & -154.209 & -80.3018 & 10.8873 \\ -220.883 & 151.385 & 166.689 & 83.0009 & -11.7901 \\ -693.234 & 449.621 & 487.653 & 257.443 & -33.5383 \\ 360.709 & -235.662 & -252.65 & -130.26 & 22.3023 \\ 357.916 & -238.454 & -255.443 & -133.052 & 14.8651 \\ -1021.5 & 655.109 & 691.359 & 360.55 & -50.1145 \\ 360.709 & -261.22 & -252.65 & -130.26 & 17.6573 \\ 362.297 & -234.074 & -265.888 & -129.267 & 17.3818 \\ 360.709 & -235.662 & -252.65 & -142.86 & 17.6573 \\ 368.52 & -250.591 & -259.978 & -138.921 & 11.0916 \\ -829.716 & 565.673 & 600.063 & 314.752 & -34.2132 \end{pmatrix}$$

$$K_{63} = \{\{1, 3\}, \{1, 5\}, \{2, 5\}, \{3, 5\}, \{1, 2, 4\}, \{2, 3, 4\}\}$$

$$V_{63} = \begin{pmatrix} -5.21338 & -13.404 & 4.14254 & -13.2849 & 4.74726 \\ 167.98 & 179.496 & -54.8652 & 169.768 & -56.6165 \\ -64.6549 & -65.0883 & 29.3084 & -64.4861 & 22.0091 \\ 157.928 & 160.986 & -51.6523 & 167.446 & -53.1721 \\ -69.2965 & -70.106 & 23.5836 & -69.4567 & 30.6171 \\ -72.7757 & -73.5851 & 20.1045 & -72.9359 & 20.1798 \\ -75.3051 & -57.5971 & 20.2636 & -57.0651 & 19.5461 \\ -69.2965 & -87.6855 & 23.5836 & -69.4567 & 23.6589 \\ -82.2132 & -83.0227 & 10.617 & -82.2526 & 27.9669 \\ -69.2965 & -70.106 & 23.5836 & -86.7916 & 23.6589 \\ -71.2415 & -72.3996 & 24.0097 & -71.7287 & 7.0339 \\ 253.385 & 252.512 & -72.6793 & 250.245 & -69.6294 \end{pmatrix}$$

$$K_{64} = \{\{1, 2, 5\}, \{1, 3, 4\}, \{2, 3, 4\}\}$$



$$V_{64} = \begin{pmatrix} 19.2601 & 5.02964 & 2.92248 & -0.923484 & -0.331642 \\ 4.4327 & 18.6581 & 3.02275 & -1.17559 & -0.237133 \\ -4.84913 & -4.84805 & 2.05162 & 3.44958 & 0.595587 \\ -4.96289 & -4.9624 & 1.7752 & 4.37009 & 1.06115 \\ 1.26232 & 1.26282 & -0.677383 & 1.29085 & 4.62621 \\ -1.52986 & -1.52936 & -3.46957 & -1.50133 & -2.81097 \\ -24.2955 & 1.26282 & -0.677383 & 1.29085 & -0.0187845 \\ 1.26232 & -24.295 & -0.677383 & 1.29085 & -0.0187845 \\ 2.85047 & 2.85096 & -13.9153 & 2.28431 & -0.294292 \\ 11.3014 & 11.3009 & 6.29648 & -14.9307 & -1.02799 \\ -8.89956 & -8.89865 & -1.34611 & -0.865176 & -6.87861 \\ 4.1676 & 4.16814 & 4.69459 & 5.41975 & 5.33526 \end{pmatrix}$$

$$K_{65} = \{\{1, 3\}, \{1, 4\}, \{1, 2, 5\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{65} = \begin{pmatrix} 24.5826 & 28.9715 & -21.4127 & -22.6478 & 28.638 \\ 20.0832 & 38.7823 & -21.4979 & -23.0278 & 28.8915 \\ -6.14135 & -8.83061 & 16.0936 & 7.96962 & -8.33961 \\ -5.67879 & -7.20914 & 7.35069 & 15.9733 & -7.93582 \\ -1.93035 & -1.8995 & 3.12956 & 2.5644 & 6.55772 \\ -8.66684 & -10.1972 & 4.36264 & 3.91272 & -10.9239 \\ -11.2946 & 4.91441 & 8.5917 & -1.09097 & -4.91666 \\ -5.67879 & -25.0042 & 7.35069 & 6.90077 & -7.93582 \\ -11.376 & -15.2791 & -3.86897 & 13.4915 & -16.0935 \\ 0.889465 & 3.09038 & 0.661927 & -19.5438 & 1.20277 \\ -12.9828 & -32.8127 & 4.72981 & 23.7784 & -32.3651 \\ 18.1942 & 25.4739 & -5.49108 & -8.28034 & 23.2204 \end{pmatrix}$$

$$K_{66} = \{\{1, 5\}, \{2, 5\}, \{1, 2, 3\}, \{1, 2, 4\}, \{3, 4, 5\}\}$$

$$V_{66} = \begin{pmatrix} 312.002 & 485.368 & -320.796 & 583.064 & -229.664 \\ 155.031 & 258.706 & -165.873 & 300.276 & -116.139 \\ -68.677 & -108.507 & 78.3815 & -126.633 & 52.4526 \\ -27.3402 & -43.0775 & 29.7265 & -42.9253 & 20.6985 \\ -66.7962 & -105.856 & 72.0701 & -128.786 & 59.3172 \\ -69.7842 & -108.844 & 69.082 & -131.774 & 47.3111 \\ -75.8827 & -105.856 & 72.0701 & -128.786 & 50.2992 \\ -66.7962 & -123.546 & 72.0701 & -128.786 & 50.2992 \\ -66.4922 & -105.372 & 53.7271 & -128.198 & 50.0711 \\ -64.6103 & -102.774 & 75.1846 & -149.36 & 47.7964 \\ -74.5509 & -117.486 & 70.644 & -131.771 & 39.8572 \\ 113.897 & 177.245 & -106.287 & 213.679 & -72.2992 \end{pmatrix}$$

$$K_{67} = \{\{4, 5\}, \{1, 3, 4\}, \{1, 3, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{67} = \begin{pmatrix} 4.76865 & -0.734018 & 1.64928 & 1.59419 & 1.59942 \\ -1.13231 & 4.36738 & 1.9749 & 1.90758 & 1.91281 \\ 0.0825576 & 0.0825887 & 14.1026 & 2.87344 & 2.87865 \\ 1.92742 & 1.92745 & -3.14497 & 7.7784 & -3.09249 \\ 1.92363 & 1.92366 & -3.13251 & -3.08544 & 7.79601 \\ -1.87582 & -1.87579 & -2.4038 & -2.4097 & -2.40449 \\ -8.55948 & 1.09146 & -0.397269 & -0.39193 & -0.386712 \\ 1.15805 & -8.49079 & -0.61622 & -0.60754 & -0.602322 \\ 1.82913 & 1.82906 & -20.0075 & -0.423715 & -0.418503 \\ -3.95684 & -3.95633 & 4.28517 & -14.8308 & 4.13636 \\ -1.835 & -1.83471 & 2.54965 & 2.46076 & -16.5587 \\ 5.67001 & 5.67004 & 5.14066 & 5.13478 & 5.14 \end{pmatrix}$$

$$K_{68} = \{\{4, 5\}, \{1, 2, 3\}, \{1, 2, 5\}, \{1, 3, 4\}, \{2, 3, 4\}\}$$

$$V_{68} = \begin{pmatrix} 209. & 194.039 & 80.1767 & -182.885 & -131.471 \\ 194.337 & 207.754 & 80.3626 & -183.18 & -131.389 \\ 195.709 & 194.939 & 86.822 & -182.322 & -131.627 \\ -444.778 & -445.461 & -179.646 & 422.453 & 299.91 \\ -259.167 & -259.874 & -109.947 & 250.282 & 184.718 \\ 192.917 & 192.147 & 77.0298 & -185.114 & -134.419 \\ -431.17 & -393.62 & -165.752 & 377.497 & 269.429 \\ 21.4947 & -8.56246 & 7.1417 & -16.6373 & -12.9298 \\ 203.833 & 203.062 & 69.3874 & -187.558 & -136.36 \\ 195.709 & 194.939 & 79.822 & -194.922 & -131.627 \\ 189.824 & 189.054 & 82.1406 & -186.004 & -138.937 \\ -267.711 & -268.417 & -107.538 & 268.39 & 194.701 \end{pmatrix}$$

$$K_{69} = \{\{1, 5\}, \{1, 2, 3\}, \{1, 2, 4\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{69} = \begin{pmatrix} 10747.9 & 15614.1 & -5464.6 & 9885.29 & -11532.7 \\ 8853.93 & 12895.6 & -4508.58 & 8153.72 & -9510.56 \\ -2507.53 & -3646.16 & 1285.53 & -2308.11 & 2692.81 \\ -2496.1 & -3629.67 & 1268.52 & -2286.56 & 2680.22 \\ -2499.85 & -3634.98 & 1272.74 & -2301.05 & 2693.63 \\ -2502.84 & -3637.97 & 1269.75 & -2304.04 & 2681.57 \\ -2508.91 & -3634.98 & 1272.74 & -2301.05 & 2684.56 \\ -2499.85 & -3652.78 & 1272.74 & -2301.05 & 2684.56 \\ -2505.55 & -3643.05 & 1261.52 & -2309.21 & 2691.15 \\ -2521.57 & -3666.57 & 1283.73 & -2339.07 & 2707.87 \\ -2514.88 & -3657.07 & 1276.58 & -2311.73 & 2681.93 \\ 2955.22 & 4293.5 & -1490.68 & 2722.86 & -3155.07 \end{pmatrix}$$

$$K_{70} = \{\{1, 3\}, \{2, 3\}, \{1, 2, 4\}, \{1, 2, 5\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{70} = \begin{pmatrix} 21.6523 & 24.167 & -18.7896 & 26.383 & -21.1823 \\ 16.1985 & 32.3401 & -18.0509 & 25.8943 & -21.0318 \\ -1.86201 & -2.1283 & 12.0347 & -5.06385 & 6.16695 \\ 1.88643 & 3.18134 & -1.09731 & 9.42969 & 1.83059 \\ -9.18398 & -12.8639 & 10.5593 & -10.6145 & 17.5982 \\ -4.85006 & -5.11635 & 0.135776 & -8.0519 & 3.1789 \\ -10.921 & -2.1283 & 3.12382 & -5.06385 & 6.16695 \\ -1.86201 & -19.9234 & 3.12382 & -5.06385 & 6.16695 \\ -17.6637 & -25.0141 & 2.18822 & -20.8765 & 16.0186 \\ -12.6415 & -17.9333 & 14.0704 & -31.3276 & 9.65245 \\ 4.22819 & 6.49842 & -3.73436 & 3.65662 & -19.1704 \\ 15.0188 & 18.9208 & -3.56386 & 20.6985 & -5.39509 \end{pmatrix}$$

$$K_{71} = \{\{2, 5\}, \{1, 2, 3\}, \{1, 2, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}\}$$

$$V_{71} = \begin{pmatrix} 194.185 & 115.077 & -32.4937 & -32.3356 & 114.014 \\ -13.912 & -1.01551 & 4.74233 & 4.90201 & -10.0946 \\ -122.562 & -74.0902 & 28.6837 & 20.8595 & -73.476 \\ -122.541 & -74.1047 & 20.7193 & 28.8649 & -73.4902 \\ 15.4123 & 7.87591 & -0.258158 & -0.0987084 & 17.1081 \\ -123.004 & -78.3204 & 20.2341 & 20.3946 & -77.6691 \\ -133.909 & -75.6626 & 22.8919 & 23.0524 & -75.0113 \\ -123.928 & -86.3826 & 19.3472 & 19.5077 & -72.5296 \\ 249.892 & 152.163 & -60.1742 & -40.085 & 150.806 \\ 357.551 & 218.41 & -58.6011 & -80.2909 & 216.47 \\ -123.858 & -73.1707 & 19.4166 & 19.5771 & -85.6323 \\ -53.3269 & -30.7786 & 15.492 & 15.652 & -30.4949 \end{pmatrix}$$

$$K_{72} = \{\{1, 3, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}\}$$

$$V_{72} = \begin{pmatrix} 4.55564 & 0.298138 & 0.477139 & 0.485653 & 0.463357 \\ -1.32305 & 4.89997 & 2.24092 & 2.25082 & 2.22826 \\ 0.254052 & 0.534639 & 12.5587 & -0.395777 & -0.418091 \\ 0.0191358 & 0.0173603 & 1.01708 & 14.0043 & 1.00338 \\ 0.0649538 & 0.11825 & 0.739838 & 0.748448 & 13.7017 \\ -2.50646 & -2.42504 & -1.99654 & -1.98793 & -2.01024 \\ -8.11631 & -2.41991 & 7.71464 & 7.72325 & 7.70093 \\ 1.87787 & -6.18431 & -10.23 & -10.2214 & -10.2437 \\ 0.716125 & 0.944046 & -20.9339 & -0.124325 & -0.146526 \\ 3.98437 & 4.975 & -3.93608 & -24.8516 & -3.95267 \\ -3.45389 & -4.19913 & 4.72088 & 4.73275 & -15.94 \\ 3.92755 & 3.44098 & 7.62739 & 7.63584 & 7.61355 \end{pmatrix}$$

$$K_{73} = \{\{1, 2, 3\}, \{1, 2, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{73} = \begin{pmatrix} 8.08381 & 0.412021 & 0.00906314 & 0.000836777 & 0.40043 \\ -0.94794 & 6.59036 & 1.41195 & 1.37819 & -1.40982 \\ 0.798387 & 1.47419 & 7.41228 & -0.616992 & 1.44872 \\ 0.960002 & 1.39313 & -0.460919 & 7.45141 & 1.36957 \\ -0.650071 & -1.17586 & 1.31077 & 1.27975 & 6.72747 \\ -0.778207 & -1.72064 & -2.20162 & -2.20933 & -1.73334 \\ -11.4476 & 0.927683 & 0.446709 & 0.43914 & 0.915123 \\ 0.767565 & -11.8575 & -0.652834 & -0.647365 & 1.46381 \\ 0.830842 & 0.0607985 & -12.5428 & 0.790365 & 0.0582699 \\ -1.79102 & -2.12863 & 1.69834 & -11.4316 & -2.10564 \\ 0.144081 & 1.80239 & -1.27462 & -1.26174 & -11.3534 \\ 4.0301 & 4.22211 & 4.84364 & 4.82734 & 4.21886 \end{pmatrix}$$

$$K_{74} = \{\{1, 2, 3\}, \{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{3, 4, 5\}\}$$

$$V_{74} = \begin{pmatrix} 100.982 & 61.5898 & -131.337 & -131.331 & -158.037 \\ 95.1319 & 67.9992 & -129.096 & -129.09 & -159.605 \\ -178.712 & -113.86 & 256.639 & 242.787 & 298.975 \\ -174.522 & -111.202 & 237.09 & 250.873 & 291.96 \\ -168.46 & -112.401 & 237.671 & 237.681 & 299.052 \\ 92.4741 & 57.3253 & -131.754 & -131.748 & -162.263 \\ 83.7095 & 61.3333 & -131.969 & -131.963 & -163.091 \\ 96.4228 & 52.5602 & -139.309 & -139.303 & -165.305 \\ 95.1319 & 59.9831 & -142.442 & -129.09 & -159.605 \\ 95.1319 & 59.9831 & -129.096 & -142.436 & -159.605 \\ 91.6201 & 62.4751 & -132.571 & -132.565 & -170.226 \\ -228.911 & -145.785 & 336.173 & 336.184 & 407.751 \end{pmatrix}$$

$$K_{75} = \{\{1, 3\}, \{1, 5\}, \{2, 4\}, \{2, 5\}, \{3, 4\}\}$$

$$V_{75} = \begin{pmatrix} 4.62279 & 0.472297 & 1.73679 & -1.14745 & 1.47663 \\ -0.277437 & 6.54224 & 0.858209 & 1.12908 & 0.86835 \\ 0.790452 & 1.69476 & 7.96665 & 0.0765883 & -0.159032 \\ 1.48827 & 0.644595 & -0.0801483 & 7.75763 & 0.0191208 \\ 1.05538 & 0.766258 & 0.104982 & 0.394198 & 7.05704 \\ -2.42029 & -2.70941 & -3.37069 & -3.08147 & -3.32199 \\ -15.9851 & -1.32411 & -1.82505 & 1.10924 & 0.857706 \\ 9.70647 & -19.4253 & -3.5948 & 7.61825 & -2.5355 \\ 6.24643 & -3.46516 & -19.2954 & 7.74124 & -0.960662 \\ -3.06461 & 0.718111 & 4.82071 & -16.2952 & 0.828417 \\ -5.11019 & 5.94697 & -1.83814 & -12.7402 & -14.3926 \\ 2.94786 & 10.1388 & 14.5169 & 7.43805 & 10.2625 \end{pmatrix}$$

$$K_{76} = \{\{1, 3\}, \{1, 4\}, \{2, 3\}, \{2, 5\}, \{3, 4\}, \{3, 5\}\}$$

$$V_{76} = \begin{pmatrix} 6.76525 & -0.115216 & 0.92999 & 0.226704 & 0.0670729 \\ 1.07062 & 6.40938 & 0.396173 & -0.0787368 & 1.60818 \\ 2.11913 & 0.244965 & 7.16724 & -0.570508 & 1.27565 \\ 1.97567 & 1.22606 & -0.355932 & 7.43018 & 1.20394 \\ 0.842558 & 0.869597 & 0.546267 & -0.146589 & 6.77725 \\ -1.36 & -3.23416 & -3.36834 & -4.04963 & -2.20348 \\ -15.9499 & 3.29082 & -1.33816 & 2.64831 & 1.05302 \\ -2.1137 & -15.1998 & 1.55475 & 0.835114 & -3.52912 \\ -4.26851 & -1.69899 & -15.1814 & 1.53879 & -0.992755 \\ -3.47656 & -1.1607 & 2.02448 & -15.9624 & -0.989935 \\ 0.481589 & 1.2891 & -0.558018 & 2.334 & -15.8134 \\ 13.9138 & 8.07898 & 8.18296 & 5.79472 & 11.5435 \end{pmatrix}$$

$$K_{77} = \{\{1, 2\}, \{1, 5\}, \{2, 3, 4\}, \{3, 4, 5\}\}$$

$$V_{77} = \begin{pmatrix} 120.23 & 88.1833 & -92.0673 & -92.2135 & -37.0666 \\ 189.541 & 154.214 & -151.056 & -151.295 & -64.9667 \\ -22.4016 & -13.0401 & 33.1595 & 23.0256 & 4.18583 \\ -70.2435 & -54.4291 & 56.2294 & 66.4191 & 23.1512 \\ -61.1235 & -49.3273 & 49.6078 & 49.6645 & 34.6796 \\ -67.0629 & -52.1265 & 48.3842 & 48.4418 & 17.2418 \\ -133.988 & -99.5363 & 92.4039 & 92.5591 & 43.8202 \\ -65.6102 & -60.1193 & 53.2262 & 53.2845 & 17.5782 \\ -59.0664 & -46.2045 & 24.532 & 47.9892 & 21.0074 \\ -71.4142 & -56.9254 & 57.8898 & 34.7457 & 27.4438 \\ -51.3142 & -37.0959 & 44.2702 & 44.3019 & -7.94707 \\ 292.454 & 226.407 & -216.58 & -216.923 & -79.1276 \end{pmatrix}$$

$$K_{78} = \{\{1, 2, 3\}, \{2, 3, 4\}, \{3, 4, 5\}\}$$

$$V_{78} = \begin{pmatrix} 10.1364 & 17.6354 & 14.8819 & -11.3206 & -2.12941 \\ 12.2274 & 32.3425 & 18.9454 & -10.9578 & -6.34901 \\ 0.809037 & 1.47145 & 10.703 & 0.0304474 & -0.0983072 \\ -2.64294 & -12.8286 & -9.88433 & 19.6585 & 0.885519 \\ -4.53276 & -11.0415 & -6.0381 & 6.36364 & 9.89543 \\ -5.78355 & -7.25435 & -7.23981 & -0.0535921 & -0.29726 \\ -10.9799 & -0.934502 & -3.37331 & 1.24811 & 3.47158 \\ -2.83511 & -19.9366 & -2.78933 & 0.966239 & 3.15951 \\ -8.15304 & -24.6438 & -27.3327 & 13.0548 & -2.1009 \\ 7.62106 & 20.8547 & 10.3121 & -28.0171 & 0.87004 \\ -9.16248 & -16.659 & -15.9628 & 10.0392 & -10.2377 \\ 13.2959 & 20.9944 & 17.7781 & -1.01191 & 2.93053 \end{pmatrix}$$

$$K_{79} = \{\{1, 4\}, \{2, 4\}, \{3, 4\}, \{1, 2, 5\}, \{2, 3, 5\}\}$$

$$V_{79} = \begin{pmatrix} -18.5546 & -29.6035 & 9.53213 & 9.62797 & -29.3233 \\ 135.282 & 149.765 & -50.4265 & -45.4241 & 140.287 \\ 45.934 & 45.9745 & 5.0536 & -16.6483 & 45.5794 \\ -91.0084 & -87.4996 & 24.4634 & 37.8705 & -86.7183 \\ 115.288 & 120.668 & -44.5013 & -38.4583 & 127.476 \\ -94.4875 & -90.9787 & 20.9843 & 27.4332 & -90.1974 \\ -146.89 & -128.476 & 35.0732 & 44.4946 & -127.313 \\ -81.3667 & -103.717 & 29.6693 & 28.1795 & -85.3192 \\ -103.925 & -100.416 & 11.4968 & 35.2203 & -99.5142 \\ 24.3475 & 1.97582 & 22.0732 & -24.7385 & 2.09791 \\ -75.7824 & -85.3433 & 32.6846 & 26.5967 & -101.85 \\ 291.163 & 307.65 & -96.1026 & -84.1536 & 304.794 \end{pmatrix}$$

$$K_{80} = \{\{2, 4\}, \{3, 5\}, \{1, 2, 5\}, \{1, 3, 4\}\}$$

$$V_{80} = \begin{pmatrix} 4.6846 & -4.42731 & 2.67433 & 2.81061 & -4.20568 \\ 123.682 & 133.362 & -43.6951 & -42.5432 & 124.034 \\ -52.8405 & -60.7689 & 33.2776 & 25.8399 & -59.9731 \\ -54.3246 & -61.6537 & 25.8834 & 32.5846 & -60.7208 \\ 117.18 & 118.623 & -41.5486 & -40.3424 & 125.566 \\ -65.7609 & -64.3182 & 16.5034 & 16.0339 & -63.669 \\ -84.1052 & -65.8905 & 20.8803 & 21.1468 & -64.3873 \\ -52.3295 & -79.4423 & 27.3629 & 27.1573 & -60.854 \\ -75.1984 & -73.7557 & 7.01596 & 23.821 & -72.9857 \\ -48.353 & -44.7098 & 16.7265 & -3.09652 & -46.4107 \\ -70.4667 & -61.2793 & 14.8554 & 14.3664 & -78.019 \\ 257.832 & 264.261 & -79.936 & -77.7783 & 261.625 \end{pmatrix}$$

$$K_{81} = \{\{1, 3\}, \{1, 2, 5\}, \{2, 4, 5\}, \{3, 4, 5\}\}$$

$$V_{81} = \begin{pmatrix} 24.1422 & 30.5112 & -20.7155 & -24.3928 & 29.371 \\ 20.5818 & 36.9594 & -22.2974 & -20.9674 & 28.0121 \\ -5.64282 & -10.6535 & 15.2941 & 10.0301 & -9.21897 \\ -6.42288 & -4.45643 & 8.54881 & 12.8576 & -6.60456 \\ -1.43181 & -3.72239 & 2.33005 & 4.62486 & 5.67837 \\ -8.1683 & -12.0201 & 3.56313 & 5.97317 & -11.8032 \\ -10.796 & 3.09152 & 7.79219 & 0.969483 & -5.79602 \\ -5.61678 & -25.2143 & 7.25293 & 7.14561 & -8.0386 \\ -10.7802 & -17.4621 & -4.82619 & 15.9585 & -17.1471 \\ 1.388 & 1.26749 & -0.137585 & -17.4834 & 0.323418 \\ -14.3583 & -27.666 & 6.96185 & 17.9823 & -29.8613 \\ 17.1053 & 29.3651 & -3.76636 & -12.6979 & 25.0849 \end{pmatrix}$$

$$K_{82} = \{\{1, 3, 4\}, \{1, 3, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{82} = \begin{pmatrix} 4.51657 & -0.98214 & 3.11352 & 1.03248 & 1.0403 \\ -1.38439 & 4.11926 & 3.43914 & 1.34587 & 1.3537 \\ -0.169531 & -0.165533 & 15.5668 & 2.31172 & 2.31954 \\ 1.8746 & 1.8787 & -2.79317 & 7.64354 & -3.23126 \\ 0.480311 & 0.48367 & 4.982 & -6.15061 & 4.67558 \\ -2.12791 & -2.12391 & -0.939562 & -2.97142 & -2.9636 \\ -5.31195 & 4.47627 & -19.2297 & 6.73759 & 6.77427 \\ 5.90203 & -3.92084 & -27.0765 & 9.40688 & 9.4544 \\ -1.84741 & -1.84533 & 0.79723 & -8.21877 & -8.2381 \\ -4.20893 & -4.20446 & 5.74942 & -15.3925 & 3.57724 \\ -2.08709 & -2.08283 & 4.0139 & 1.89904 & -17.1179 \\ 4.3637 & 4.36715 & 12.3769 & 2.3562 & 2.35578 \end{pmatrix}$$

$$K_{83} = \{\{1, 5\}, \{1, 2, 4\}, \{1, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{83} = \begin{pmatrix} -51.4786 & 13.5278 & -54.8863 & -58.4423 & 18.5016 \\ 81.056 & -2.77922 & 64.544 & 80.4712 & -25.4295 \\ 164.132 & -50.5414 & 186.795 & 162.387 & -46.3633 \\ 154.646 & -48.3472 & 148.348 & 161.19 & -51.7762 \\ -102.011 & 29.9133 & -103.103 & -101.13 & 38.5717 \\ -93.9833 & 24.0274 & -92.847 & -93.2289 & 25.8343 \\ -216.493 & 50.1829 & -218.778 & -196.969 & 50.9878 \\ -103.421 & 14.5399 & -102.285 & -102.546 & 33.6215 \\ -136.019 & 37.4279 & -147.307 & -134.915 & 44.0263 \\ -1.31084 & 8.85113 & 17.0947 & -18.885 & 11.4824 \\ -67.624 & 22.2246 & -68.8113 & -67.0495 & 4.52413 \\ 372.506 & -99.0272 & 371.235 & 369.117 & -103.981 \end{pmatrix}$$

$$K_{84} = \{\{1, 2, 3\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 4, 5\}\}$$

$$V_{84} = \begin{pmatrix} -134.108 & -179.999 & -209.276 & 177.873 & 176.454 \\ 1090.52 & 1417.05 & 1646.84 & -1372.02 & -1361.16 \\ 328.553 & 421.531 & 501.268 & -422.012 & -418.155 \\ -281.767 & -362.284 & -423.303 & 371.542 & 354.5 \\ -280.863 & -360.314 & -425.282 & 354.551 & 363.032 \\ -284.502 & -364.95 & -426.391 & 354.043 & 351.207 \\ -287.741 & -356.997 & -427.238 & 352.508 & 341.747 \\ -283.045 & -377.597 & -425.344 & 351.991 & 357.121 \\ -281.709 & -362.158 & -436.198 & 356.835 & 353.999 \\ -74.5499 & -96.2371 & -111.402 & 65.4419 & 94.3921 \\ -99.5682 & -128.583 & -148.781 & 127.358 & 95.6022 \\ 588.78 & 750.533 & 885.104 & -718.114 & -708.743 \end{pmatrix}$$

$$K_{85} = \{\{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 4\}, \{1, 3, 5\}, \{2, 3, 4\}\}$$

$$V_{85} = \begin{pmatrix} 240312. & -43254.2 & -43801.2 & 154416. & 153157. \\ 239995. & -43193. & -43748. & 154226. & 152970. \\ 239995. & -43200.9 & -43740. & 154226. & 152970. \\ -243319. & 43797.3 & 44351.9 & -156357. & -155085. \\ -286441. & 51559.1 & 52211.9 & -184070. & -182568. \\ 239995. & -43201.4 & -43748.5 & 154222. & 152965. \\ -317836. & 57209.5 & 57933.7 & -204242. & -202578. \\ -435869. & 78455.6 & 79448.9 & -280093. & -277810. \\ -435536. & 78395.8 & 79388.2 & -279879. & -277598. \\ 239994. & -43202.3 & -43749.4 & 154214. & 152971. \\ 239994. & -43202.3 & -43749.3 & 154227. & 152958. \\ 278717. & -50163.2 & -50798.3 & 179108. & 177649. \end{pmatrix}$$

$$K_{86} = \{\{1, 2, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}\}$$

$$V_{86} = \begin{pmatrix} 5.22012 & -2.96847 & -3.83874 & 1.94599 & 2.80782 \\ 0.211762 & 7.99361 & 2.99726 & 0.591568 & -2.3922 \\ -0.0349828 & 0.46632 & 6.25395 & -0.0330443 & 2.16793 \\ 0.99913 & 1.43258 & -0.414107 & 7.43447 & 1.34881 \\ -0.610943 & -1.13642 & 1.35758 & 1.26281 & 6.70672 \\ -0.739078 & -1.6812 & -2.1548 & -2.22627 & -1.7541 \\ -11.4084 & 0.96713 & 0.493521 & 0.4222 & 0.894365 \\ 0.806693 & -11.8181 & -0.606022 & -0.664304 & 1.44305 \\ 0.86997 & 0.100246 & -12.496 & 0.773426 & 0.0375124 \\ 0.0478992 & 0.0691669 & 4.22219 & -12.7406 & -3.6768 \\ 2.14025 & 4.19604 & 1.4402 & -2.63144 & -13.0943 \\ 2.4976 & 2.37909 & 2.74492 & 5.8652 & 5.5112 \end{pmatrix}$$

$$K_{87} = \{\{2, 4\}, \{1, 2, 5\}, \{1, 3, 4\}\}$$

$$V_{87} = \begin{pmatrix} 10.7955 & 1.44826 & 1.64079 & 0.716236 & 2.71514 \\ 129.793 & 139.238 & -44.7287 & -44.6375 & 130.955 \\ -52.9546 & -60.8773 & 33.2962 & 25.8782 & -60.1011 \\ -48.2138 & -55.7782 & 24.8498 & 30.4902 & -53.8 \\ 117.441 & 118.874 & -41.592 & -40.4322 & 125.862 \\ -59.6501 & -58.4426 & 15.4699 & 13.9395 & -56.7481 \\ -171.003 & -149.434 & 35.5755 & 50.9243 & -162.798 \\ -3.15809 & -32.177 & 19.0498 & 10.3105 & -5.17412 \\ -69.0876 & -67.8802 & 5.98242 & 21.7267 & -66.0649 \\ -57.9613 & -53.9457 & 18.3511 & 0.196551 & -57.2899 \\ -64.3559 & -55.4037 & 13.8218 & 12.272 & -71.0982 \\ 268.356 & 274.379 & -81.7166 & -81.3845 & 273.542 \end{pmatrix}$$

$$K_{88} = \{\{1, 2, 5\}, \{1, 3, 4\}\}$$

$$V_{88} = \begin{pmatrix} 10.3075 & 0.533626 & 2.13813 & 0.829986 & 2.17077 \\ 128.042 & 135.963 & -42.9503 & -44.2292 & 129.003 \\ -53.4425 & -61.792 & 33.7936 & 25.992 & -60.6454 \\ -52.6766 & -64.1328 & 29.387 & 31.53 & -58.7779 \\ 116.953 & 117.96 & -41.0947 & -40.3184 & 125.318 \\ -60.138 & -59.3573 & 15.9672 & 14.0532 & -57.2925 \\ -177.54 & -161.681 & 42.2295 & 52.4478 & -170.091 \\ -3.646 & -33.0916 & 19.5471 & 10.4242 & -5.71849 \\ -53.8298 & -39.3171 & -9.53165 & 18.1694 & -49.0446 \\ -58.4492 & -54.8603 & 18.8484 & 0.3103 & -57.8343 \\ -58.5843 & -44.5996 & 7.95515 & 10.9257 & -64.6609 \\ 263.003 & 264.376 & -76.2894 & -80.135 & 267.574 \end{pmatrix}$$