

Supplementary: List of additional notations

$$\begin{aligned}
\Gamma_1 &= 17 + 12\theta - 10\theta^2 - 4\theta^3 + 2\theta^4 \\
\Gamma_2 &= 17 - 12\theta - 10\theta^2 + 4\theta^3 + 2\theta^4 \\
\Gamma_3 &= 1768 - 3844\theta^2 + 3081\theta^4 - 1132\theta^6 + 190\theta^8 - 12\theta^{10} \\
\Gamma_4 &= 1472 - 3059\theta^2 + 2332\theta^4 - 818\theta^6 + 132\theta^8 - 8\theta^{10} \\
\Gamma_5 &= 1564 - 3392\theta^2 + 2787\theta^4 - 1106\theta^6 + 214\theta^8 - 16\theta^{10} \\
\Gamma_6 &= 1242 - 2493\theta^2 + 1856\theta^4 - 662\theta^6 + 116\theta^8 - 8\theta^{10} \\
\Gamma_7 &= 286 - 481\theta^2 + 270\theta^4 - 64\theta^6 + 6\theta^8 \\
\Gamma_8 &= 894 - 1540\theta^2 + 897\theta^4 - 222\theta^6 + 22\theta^8 \\
\Gamma_9 &= 612 - 1072\theta^2 + 643\theta^4 - 167\theta^6 + 18\theta^8 \\
\Gamma_{10} &= 68 - 75\theta - 72\theta^2 + 60\theta^3 + 40\theta^4 - 14\theta^5 - 8\theta^6 \\
\Gamma_{11} &= 61 - 60\theta - 50\theta^2 + 40\theta^3 + 22\theta^4 - 8\theta^5 - 4\theta^6 \\
\Gamma_{12} &= 179180 - 615706\theta^2 + 881913\theta^4 - 688790\theta^6 + 322309\theta^8 - 93152\theta^{10} + 16364\theta^{12} - 1608\theta^{14} + 68\theta^{16} \\
\Gamma_{13} &= 172448 - 584755\theta^2 + 823888\theta^4 - 631013\theta^6 + 2\theta^8(144437 - 40790\theta^2 + 7004\theta^4 - 674\theta^6 + 28\theta^8) \\
\Gamma_{14} &= 87202 - 292738\theta^2 + 406779\theta^4 - 306020\theta^6 + 137086\theta^8 - 37768\theta^{10} + 6316\theta^{12} - 592\theta^{14} + 24\theta^{16} \\
\Gamma_{15} &= 1003 + 510\theta - 2299\theta^2 - 896\theta^3 + 2007\theta^4 + 542\theta^5 - 830\theta^6 - 136\theta^7 + 162\theta^8 + 12\theta^9 - 12\theta^{10} \\
\Gamma_{16} &= 199 + 198\theta - 774\theta^2 - 426\theta^3 + 916\theta^4 + 300\theta^5 - 456\theta^6 - 84\theta^7 + 100\theta^8 + 8\theta^9 - 8\theta^{10} \\
\Gamma_{17} &= 38 + 30\theta - 37\theta^2 - 22\theta^3 + 14\theta^4 + 4\theta^5 - 2\theta^6 \\
\Gamma_{18} &= 612 - 1358\theta^2 + 1124\theta^4 - 437\theta^6 + 82\theta^8 - 6\theta^{10} \\
\Gamma_{19} &= 85 - 121\theta^2 + 50\theta^4 - 6\theta^6 \\
\Gamma_{20} &= 33 - 60\theta^2 + 30\theta^4 - 4\theta^6 \\
\lambda_1 &= 4148 + 5425\theta - 2763\theta^2 - 5048\theta^3 + 338\theta^4 + 1490\theta^5 + 30\theta^6 - 152\theta^7 \\
\lambda_2 &= 3349 + 23894\theta + 18060\theta^2 - 21340\theta^3 - 16888\theta^4 + 6956\theta^5 + 4152\theta^6 - 896\theta^7 - 236\theta^8 \\
\lambda_3 &= 6732 + 57575\theta + 48744\theta^2 - 54914\theta^3 - 46102\theta^4 + 25584\theta^5 + 14396\theta^6 - 6348\theta^7 - 1492\theta^8 + 620\theta^9 \\
\lambda_4 &= 2809 + 24324\theta + 23352\theta^2 - 19176\theta^3 - 23176\theta^4 + 4456\theta^5 + 6728\theta^6 - 352\theta^7 - 604\theta^8 \\
\lambda_5 &= 4 - \rho_1(5 - 2\rho_1) \\
\lambda_6 &= 2 - (1 - \theta^2)\rho_1 \\
\lambda_7 &= 2 - (1 - \theta^2)\rho_2 \\
\lambda_8 &= 4 - (1 - \theta)\rho_2(5 - 2(1 - \theta)\rho_2) \\
\lambda_9 &= 16 + (1 - \theta)\rho_2(40 - (1 - \theta)\rho_2(719 - 4(1 - \theta)\rho_2(223 - 75(1 - \theta)\rho_2))) \\
\lambda_{10} &= \rho_2^2 - 892(1 - \theta)^3\rho_2^3 - 300(1 - \theta)^4\rho_2^4 \\
\Upsilon_1 &= 4\lambda_5 - 20\rho_2 + \rho_1(25 - 10\rho_1 - \theta^2(9 - 10\rho_1))\rho_2 + 2(4 + (1 - \theta^2)\rho_1(1 - 2\lambda_6)\rho_2^2.
\end{aligned}$$