```
m_t(\text{tr}(1+2|\mathbf{5})\text{tr}(\mathbf{5}|\mathbf{4}) - 2m_h^2\text{tr}(\mathbf{4}|1+2))(1/6|\mathbf{3}2][1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle\mathbf{4}4\text{ terms}\rangle\rangle\dots - 1/3|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1][12]\langle 1\mathbf{4}\rangle) - 2m_h^2\text{tr}(\mathbf{4}|1+2))(1/6|\mathbf{3}2][1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle\mathbf{4}4\text{ terms}\rangle\rangle\dots - 1/3|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1][12]\langle 1\mathbf{4}\rangle) - 2m_h^2\text{tr}(\mathbf{4}|1+2))(1/6|\mathbf{3}2)[1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle\mathbf{4}4\text{ terms}\rangle\rangle\dots - 1/3|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1][12]\langle 1\mathbf{4}\rangle) - 2m_h^2\text{tr}(\mathbf{4}|1+2))(1/6|\mathbf{3}2)[1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle\mathbf{4}4\text{ terms}\rangle\rangle\dots - 1/3|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1][12]\langle 1\mathbf{4}\rangle\rangle
                                                                                                                                                                                                         \langle 12 \rangle [12] \Delta_{123|\mathbf{4}|\mathbf{5}} \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                           \underline{m_t(\text{tr}(1+2|\mathbf{5})\text{tr}(\mathbf{5}|\mathbf{4}) - 2m_h^2\text{tr}(\mathbf{4}|1+2))(-1/6\langle\mathbf{3}|\mathbf{4}|1]\langle2|\mathbf{3}|\mathbf{4}]\langle1|\mathbf{4}|1]\dots\langle\langle10\,\text{terms}\rangle\rangle\dots + 1/6\langle\mathbf{3}2\rangle[1\mathbf{4}]m_t^2\text{tr}(\mathbf{3}|\mathbf{4}))}
                                                                                                                                                                                                          \langle 12 \rangle [12] \Delta_{123|4|5} \Delta_{12|3|4|5}
                                [\mathbf{34}] m_{t}^{2} (\operatorname{tr}(1+2|\mathbf{5}) \operatorname{tr}(\mathbf{5}|\mathbf{4}) - 2m_{h}^{2} \operatorname{tr}(\mathbf{4}|1+2)) (-1/6 \operatorname{tr}(\mathbf{3}|\mathbf{4}) \langle 2|\mathbf{4}|1] + 1/3 \langle 2|\mathbf{4}|1] m_{t}^{2} + 1/3 \langle 2|\mathbf{3}|1] m_{t}^{2} - 1/6 \operatorname{tr}(\mathbf{3}|\mathbf{4}) \langle 2|\mathbf{3}|1])
                                                                                                                                                                                                         \langle 12 \rangle [12] \Delta_{123|\mathbf{4}|\mathbf{5}} \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                         \frac{m_t(\text{tr}(1+2|\mathbf{4})\text{tr}(\mathbf{5}|\mathbf{4})-2m_t^2\text{tr}(\mathbf{5}|\mathbf{1}+2))(1/3|\mathbf{3}2][1|\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle 35\,\text{terms}\rangle \dots -5/3\text{tr}(\mathbf{3}|\mathbf{4})[\mathbf{3}1]\langle 2|\mathbf{4}|1]\langle 1\mathbf{4}\rangle)}{\langle 12\rangle[12]\Delta_{123}|\mathbf{4}|\mathbf{5}\Delta_{12}|\mathbf{3}|\mathbf{4}|\mathbf{5}}.
m_t(\operatorname{tr}(1+2|4)\operatorname{tr}(5|4) - 2m_t^2\operatorname{tr}(5|1+2))(-1[14]\langle 31\rangle\langle 2|4|1]\langle 1|4|1] - 1[24]\langle 31\rangle\langle 2|4|1]^2 - \operatorname{tr}(3|4)[14]\langle 31\rangle\langle 2|4|1] + 2\langle 32\rangle[14]m_t^2\langle 2|4|2])
                                                                                                                                                                                                         \langle 12 \rangle [12] \Delta_{123|\mathbf{4}|\mathbf{5}} \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                                                                                               m_t(-8/3[\mathbf{3}2][1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle 30\,\mathrm{terms}\rangle\rangle\dots+8/3\langle 1|\mathbf{4}|1][\mathbf{3}1]\langle 2|\mathbf{4}|1]\langle 1\mathbf{4}\rangle)
                                                                                                                                                                                                        (12)[12]\Delta_{123|4|5}(s_{123}-m_t^2)
                                                                                                                             m_t(8/3(32)[14](1|4|1]^2...(9 \text{ terms})...-16/3(32)[14]m_t^2 \text{tr}(3|4))
                                                                                                                                                                                                      \langle 12 \rangle [12] \Delta_{123|4|5} (s_{123} - m_t^2)
                                                                                                   [\mathbf{34}] m_t^2 (8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{4}|1] + 16/3\langle 2|\mathbf{4}|1] m_t^2 + 16/3\langle 2|\mathbf{3}|1] m_t^2 + 8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|1]) - \frac{1}{2} m_t^2 (8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{4}|1] + 16/3\langle 2|\mathbf{4}|1] m_t^2 + 16/3\langle 2|\mathbf{3}|1] m_t^2 + 8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|1]) - \frac{1}{2} m_t^2 (8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{4}|1] + 16/3\langle 2|\mathbf{4}|1] m_t^2 + 16/3\langle 2|\mathbf{3}|1] m_t^2 + 8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|1] m_t^2 + 16/3\langle 2|\mathbf{3}|1] m_t^2 + 8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|1] m_t^2 + 16/3\langle 2|\mathbf{3}|1] m_t^2 + 8/3 \mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|1] m_t^2 + 16/3\langle 2|\mathbf{3}|1 m_t^2 +
                                                                                                                                                                                                      \langle 12 \rangle [12] \Delta_{123|4|5} (s_{123} - m_t^2)
                                       m_t(\text{tr}(1+2|\mathbf{5})\text{tr}(\mathbf{5}|\mathbf{3}) - 2m_h^2\text{tr}(\mathbf{3}|1+2))(-1/3[\mathbf{3}2][1|\mathbf{3}|\mathbf{4}\rangle\langle2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle44\text{ terms}\rangle\dots -1/2\text{tr}(\mathbf{3}|\mathbf{4})[\mathbf{3}1]\langle2|\mathbf{4}|1]\langle1\mathbf{4}\rangle))
                                                                                                                                                                                                            \langle 12 \rangle [12] \Delta_{124|\mathbf{3}|\mathbf{5}} \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
  \langle 12 \rangle [12] \Delta_{124|3|5} \Delta_{12|3|4|5}
                              [\mathbf{34}] m_t^2 (\operatorname{tr}(1+2|\mathbf{5}) \operatorname{tr}(\mathbf{5}|\mathbf{3}) - 2 m_h^2 \operatorname{tr}(\mathbf{3}|1+2)) (-1/6 \operatorname{tr}(\mathbf{3}|\mathbf{4}) \langle 2|\mathbf{4}|1] + 1/3 \langle 2|\mathbf{4}|1] m_t^2 - 1/3 \langle 2|\mathbf{3}|1] m_t^2 + 1/6 \operatorname{tr}(\mathbf{3}|\mathbf{4}) \langle 2|\mathbf{3}|1])
                                                                                                                                                                                                          \langle 12 \rangle [12] \Delta_{124|\mathbf{3}|\mathbf{5}} \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                         m_t(\text{tr}(1+2|\mathbf{3})\text{tr}(\mathbf{5}|\mathbf{3})-2m_t^2\text{tr}(\mathbf{5}|1+2))(-2/3|\mathbf{3}2][1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle 36\text{ terms}\rangle\dots+1/3|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1][12]\langle 1\mathbf{4}\rangle)
                                                                                                                                                                                                         \langle 12 \rangle [12] \Delta_{124|\mathbf{3}|\mathbf{5}} \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                \frac{\langle 12\rangle[12]\Delta_{12\mathbf{4}|\mathbf{3}|\mathbf{5}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}{\langle 12\rangle[12]\Delta_{12\mathbf{4}|\mathbf{3}|\mathbf{5}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}
                                                                                                                 m_t(8/3[\mathbf{3}1][2|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle \dots \langle 35 \text{ terms} \rangle \dots + 8/3 \text{tr}(\mathbf{3}|\mathbf{4})[\mathbf{3}1]\langle 2|\mathbf{4}|1]\langle 1\mathbf{4}\rangle)
                                                                                                                                                                                                      \overline{\langle 12\rangle [12] \Delta_{12\mathbf{4}|\mathbf{3}|\mathbf{5}}(s_{12}\mathbf{4}-m_t^2)}
                                                                                                                                                                                              \langle {\bf 32} \rangle [{\bf 14}] m_t^3 (16/3 m_t^2 + 8/3 {
m tr} ({\bf 3|4}))
                                                                                                                                                                                                      ^{\langle 12\rangle[12]} \Delta_{124|\mathbf{3}|\mathbf{5}} (s_{124} - m_t^2)
                                                                                                  [\mathbf{34}]m_t^2(-8/3\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{4}|1]-16/3\langle 2|\mathbf{4}|1]m_t^2-16/3\langle 2|\mathbf{3}|1]m_t^2-8/3\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|1])
                                                                                                                                                                                                      (12)[12]\Delta_{124|3|5}(s_{12}4-m_t^2)
                                                                                                                                                                                                                          \frac{-16/3 [\mathbf{3}1] \langle 2\mathbf{4} \rangle m_{t}}{\langle 12 \rangle [12] (s_{1}\mathbf{2}\mathbf{4} - m_{t}^{2})} +
                                                                                                                                                                                                                           \frac{-16/3[\mathbf{3}1]\langle 2\mathbf{4}\rangle m_t}{\langle 12\rangle[12](s_{123}-m_t^2)} +
                                                                                                                                                                                                                           \frac{-32/3\langle {\bf 32}\rangle[1{\bf 4}]m_t}{\langle 12\rangle[12](s_{12{\bf 3}}-m_t^2)}
                                                                                                                                                                                                                                                 \langle 6 \text{ terms} \rangle \dots -11/3 [3|4|2\rangle [12] \langle 24\rangle \rangle
                                                                                                                                        m_{+}(4/3[31]\langle 2|3|2]\langle 24\rangle
                                                                                                                                                                                                                                 \langle 12 \rangle [12] \Delta_{12|\mathbf{34|5}}
                                                                                                                                                             \frac{\langle \mathbf{32} \rangle m_t (4[2\mathbf{4}]\langle 2|\mathbf{4}|1] \dots \langle\!\langle 3\,\mathrm{terms} \rangle\!\rangle}{\langle 12 \rangle [12] \Delta_{12} |\mathbf{34}|\mathbf{5}}
                                                                                                                                                                                                                                                         .(3 \text{ terms})...+4[14](1|4|1])
                                                                                                         \frac{m_t(-10/3 [\mathbf{3}2][12]\langle 2\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\dots\langle\langle 52\,\mathrm{terms}\rangle\rangle\dots}{\langle 12\rangle[12]\Delta_{12}|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                                                                                                                                                                                                                                       (52 \text{ terms}) \dots -2/3[3|4|2\rangle\langle 2|4|1][12]\langle 14\rangle)_{\perp}
                                                                                                              m_t(-8/3[2\mathbf{4}]\langle \mathbf{3}|\mathbf{4}|1]\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\ldots\langle\langle 27\,\mathrm{terms}\rangle\rangle\ldots+1/3\langle \mathbf{3}2\rangle[1\mathbf{4}]\langle 2|\mathbf{3}|2]\mathrm{tr}(\mathbf{3}|\mathbf{4}))
                                                                                                                                                                                                                               \langle 12 \rangle [12] \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                                                                                                                                                                     \frac{m_t(1 \boldsymbol{[31]} \boldsymbol{[1|3|4\rangle\langle12\rangle+1} \boldsymbol{[3|4|2\rangle[12]\langle24\rangle)}}{s_{\boldsymbol{34}} \Delta_{12|\boldsymbol{34|5}}} +
                                                                                                                                                                                   m_{t}(-1[1\mathbf{4}]\langle\mathbf{3}|\mathbf{4}|1]\langle12\rangle-1\langle\mathbf{3}2\rangle\langle2|\mathbf{3}|\mathbf{4}][12])
                                                                                                                                                                                                                                      s_{\bf 34}^{\Delta}_{12|\bf 34|\bf 5}
                                                                                                                                                                                                                                -2[14][31]\langle 12 \rangle m_{t}^{2}
                                                                                                                                                                                                                                      s_{34}\Delta_{12|34|5}
                                                                                                                                                                                                                                 2\langle \mathbf{3} 2 \rangle [12] \langle 2 \mathbf{4} \rangle m_{t}^{2}
                                                                                                                                                                                                                                       s_{34}\Delta_{12|34|5}
                                                                                                                                                                                                      1/2[14][31]m_{t}^{2}(tr(1+2|3+4))^{2}
                                                                                                                                                                                                                                       12]\Delta^{2}_{12|34|5}
                                                                                                                                                                                                    1/2\langle \mathbf{32}\rangle\langle 2\mathbf{4}\rangle m_{t}^{2}(\mathrm{tr}(1+2|\mathbf{3+4}))^{2}
                                                                                                                                                                                                                                      \overline{\langle 12 \rangle \Delta_{12|34|5}^2}
                                                                                                                           m_t(6 \mathbf{[32]} [1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle \ldots \langle 50\,\mathrm{terms}\rangle \ldots -7 \mathbf{[3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1] \mathbf{[12]}\langle 1\mathbf{4}\rangle) \ ,
                                                                       \underline{m_t(6[24]\langle 3|4|1]\langle 2|3|4|2\rangle \dots \langle \!\langle 29\,\mathrm{terms}\rangle\!\rangle \dots + 3\langle 32\rangle[14]\langle 2|3|2]\mathrm{tr}(3|4) - 3\langle 32\rangle[14]\langle 12\rangle\langle 2|3|2][12])} \ ,
                                                                                                                                                                                                                                               \overline{\Delta}^{2}_{12|34|5}
                                                                                                                                           \frac{m_{t}(8/3[\mathbf{3}1]\langle 2|\mathbf{3}|2]\langle 2\mathbf{4}\rangle\ldots\langle\langle\mathbf{4}\,\mathrm{terms}\rangle\rangle\ldots+8/3[\mathbf{3}|\mathbf{4}|2\rangle[12]\langle 2\mathbf{4}\rangle)}{\langle 12\rangle[12]\Delta_{12}|\mathbf{3}\mathbf{4}|\mathbf{5}}+
                                                                                                                                                \frac{m_t(-4\langle \mathbf{32}\rangle[2\mathbf{4}]\langle 2|\mathbf{4}|1]\ldots\langle\!\langle 4\,\mathrm{terms}\rangle\!\rangle\ldots+1[1\mathbf{4}]\langle \mathbf{3}|\mathbf{4}|1]\langle 12\rangle)}{\langle 12\rangle[12]\Delta_{12}|\mathbf{34}|\mathbf{5}}
```