

$$\begin{aligned}
& \frac{[12]^2 \langle 12 \rangle \langle 231 \rangle m_t^2 \langle 9/8 \langle 12 \rangle \langle 34 \rangle + 9/16 \langle 31 \rangle \langle 24 \rangle \rangle}{\Delta_{12|3|45}^2 (s_{123} - m_t^2)} + \\
& \frac{\langle 231 \rangle m_t [12] \langle 12 \rangle \langle 9/16 \langle 31 \rangle + 2/4 \langle 131 \rangle + 9/16 \langle 32 \rangle \langle 31 \rangle + 2/4 \rangle}{\Delta_{12|3|45}^2 (s_{123} - m_t^2)} + \\
& \frac{m_t (\text{tr}(\mathbf{3|4}) \text{tr}(1+2|3) - 2m_t^2 \text{tr}(1+2|4)) (3/32 \langle 32 \rangle [14] \langle 23|2 \rangle \dots \langle 6 \text{ terms} \rangle \dots + 3/4 \langle 32 \rangle [14] \text{tr}(\mathbf{3|4}) - 3/4 \langle 32 \rangle [14] m_t^2)}{\Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{(\text{tr}(\mathbf{3|4}) \text{tr}(1+2|3) - 2m_t^2 \text{tr}(1+2|4)) (-3/32 \langle 34|1 \rangle \langle 24 \rangle \langle 23|2 \rangle \dots \langle 3 \text{ terms} \rangle \dots + 3/32 \langle 23|1 \rangle \langle 14 \rangle \langle 34|1 \rangle)}{\Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{3/32 \langle 34 \rangle \langle 23|1 \rangle (\text{tr}(1+2|3) \text{tr}(1+2|4) - 2s_{12} \text{tr}(\mathbf{3|4})) \text{tr}(\mathbf{3|4})}{\Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{-3/16 \langle 32 \rangle \langle 23|4 \rangle m_t (\text{tr}(\mathbf{3|4}) \text{tr}(1+2|3) - 2m_t^2 \text{tr}(1+2|4)) \langle 13|1 \rangle}{\langle 12 \rangle \Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{3/16 \langle 34|1 \rangle \langle 24 \rangle m_t (\text{tr}(\mathbf{3|4}) \text{tr}(1+2|3) - 2m_t^2 \text{tr}(1+2|4)) \langle 23|1 \rangle}{\langle 12 \rangle \Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{\langle 23|4|2 \rangle m_t (\text{tr}(1+2|3) \text{tr}(1+2|4) - 2s_{12} \text{tr}(\mathbf{3|4})) (-3/8 \langle 24 \rangle \langle 32 \rangle - 3/8 \langle 31 \rangle \langle 14 \rangle)}{\langle 12 \rangle \Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{(\text{tr}(\mathbf{3|4}) \text{tr}(1+2|3) - 2m_t^2 \text{tr}(1+2|4)) (3/16 \langle 34 \rangle \langle 23|4|2 \rangle \langle 23|2 \rangle - 3/16 \langle 24 \rangle \text{tr}(\mathbf{3|4}) \langle 32 \rangle \langle 13|1 \rangle)}{\langle 12 \rangle \Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{[34] \langle 23|4|2 \rangle (\text{tr}(\mathbf{3|4}) \text{tr}(1+2|3) - 2m_t^2 \text{tr}(1+2|4)) (3/16 \langle 23|2 \rangle + 3/16 \langle 13|1 \rangle)}{\langle 12 \rangle \Delta_{12|3|45} \Delta_{12|3|4|5}} + \\
& \frac{\langle 32 \rangle m_t (3/2 \langle 23|4|2 \rangle \langle 24 \rangle \dots \langle 4 \text{ terms} \rangle \dots + 3/4 [14] \text{tr}(\mathbf{3|4}) \langle 12 \rangle)}{\langle 12 \rangle \Delta_{12|3|4|5}} + \\
& \frac{(3/4 \langle 13|4|2 \rangle \langle 24 \rangle \langle 34|1 \rangle + 3/4 \langle 14 \rangle \langle 23|4|2 \rangle \langle 34|1 \rangle + 3/2 \langle 34 \rangle \langle 23|4|2 \rangle \langle 23|2 \rangle)}{\langle 12 \rangle \Delta_{12|3|4|5}} + \\
& (12345 \rightarrow 12435) + \\
& (12345 \rightarrow \overline{21345}) + \\
& (12345 \rightarrow \overline{21435}) + \\
& \frac{[12] m_t^2 (s_{13} - s_{23}) (-3/4 \langle 12 \rangle \langle 34 \rangle - 3/4 \langle 31 \rangle \langle 24 \rangle)}{(1|3|2] \Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{-3/4 [31] \langle 12 \rangle \langle 24 \rangle m_t^2 (s_{13} - s_{23})}{(1|3|2] \Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{\langle 32 \rangle [24] m_t (s_{13} - s_{23}) (3/4 \langle 13|1 \rangle - 1/6 \langle 12 \rangle \langle 12 \rangle)}{(1|3|2] \Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{-3/4 [31] \langle 12 \rangle \langle 23|4 \rangle m_t (s_{13} - s_{23})}{(1|3|2] \Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{-7/12 \langle 31 \rangle \langle 14 \rangle [12] \langle 23|1 \rangle (s_{13} - s_{23})}{(1|3|2] \Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{-1/6 [31] \langle 12 \rangle \langle 24 \rangle \langle 23|2 \rangle (s_{13} - s_{23})}{(1|3|2] \Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{-2/3 [14] \langle 32 \rangle m_t}{\langle 12 \rangle [12] (s_{123} - m_t^2)} + \\
& \frac{-23/6 [31] \langle 24 \rangle m_t}{\langle 12 \rangle [12] (s_{123} - m_t^2)} + \\
& \frac{\langle 32 \rangle (-23/6 [134] - 3/2 [12] \langle 24 \rangle)}{\langle 12 \rangle [12] (s_{123} - m_t^2)} + \\
& \frac{[31] (-1/2 \langle 23|4 \rangle + 7/6 \langle 12 \rangle [14])}{\langle 12 \rangle [12] (s_{123} - m_t^2)} + \\
& \frac{[14] \langle 32 \rangle m_t (1/24 \langle 23|2 \rangle - 65/24 \langle 12 \rangle [12] + 1/24 [131])}{\langle 12 \rangle [12] \Delta_{12|3|45}} + \\
& \frac{-13/24 [31] \langle 24 \rangle m_t}{\Delta_{12|3|45}} + \\
& \frac{(37/24 \langle 34 \rangle \langle 23|1 \rangle \text{tr}(1+2|3) + 19/24 \langle 12 \rangle \langle 34 \rangle [12] \langle 23|1 \rangle + 23/24 \langle 31 \rangle + 2/3 [12] \langle 24 \rangle)}{\langle 12 \rangle [12] \Delta_{12|3|45}} + \\
& \frac{(-1/24 \langle 23|1 \rangle [12] [12] [34] + 17/24 [34] \langle 23|1 \rangle \text{tr}(1+2|3) - 7/8 [31] \langle 12 \rangle [14] \text{tr}(1+2|3))}{\langle 12 \rangle [12] \Delta_{12|3|45}} + \\
& \frac{m_t (2 [14] \langle 32 \rangle \langle 23|2 \rangle \dots \langle 3 \text{ terms} \rangle \dots + 1/2 \langle 31 \rangle [14] \langle 23|1 \rangle)}{\Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{m_t (-1/3 [31] \langle 12 \rangle [12] \langle 24 \rangle + 1/6 [34|2] [134] + 1/6 [31] \text{tr}(\mathbf{3|4}) \langle 24 \rangle)}{\Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{(19/6 m_t^2 \langle 34 \rangle \langle 23|1 \rangle - 1/6 \langle 24|1 \rangle \langle 34 \rangle m_t^2 - 7/6 \langle 31 \rangle \langle 23|1 \rangle [12] \langle 24 \rangle)}{\Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& \frac{-1/3 [31] \langle 13|1 \rangle \langle 12 \rangle [14]}{\Delta_{12|3|45} (s_{123} - m_t^2)} + \\
& (12345 \rightarrow \overline{21435})
\end{aligned}$$