RESULTS

July 29, 2025

Target State Probability

$$P(|1111000000\rangle) = 0.5000$$

Unmitigated Measurement Outcomes

$$\begin{aligned}
P_{\text{raw}}(1111) &= 0.9673 \quad (96.7\%) \quad (9673 \text{ counts}) \\
P_{\text{raw}}(1011) &= 0.0106 \quad (1.1\%) \quad (106 \text{ counts}) \\
P_{\text{raw}}(1101) &= 0.0081 \quad (0.8\%) \quad (81 \text{ counts}) \\
P_{\text{raw}}(1110) &= 0.0077 \quad (0.8\%) \quad (77 \text{ counts}) \\
P_{\text{raw}}(0111) &= 0.0055 \quad (0.5\%) \quad (55 \text{ counts}) \\
P_{\text{raw}}(1001) &= 0.0004 \quad (0.0\%) \quad (4 \text{ counts}) \\
P_{\text{raw}}(1100) &= 0.0002 \quad (0.0\%) \quad (2 \text{ counts}) \\
P_{\text{raw}}(0011) &= 0.0001 \quad (0.0\%) \quad (1 \text{ count}) \\
P_{\text{raw}}(1010) &= 0.0001 \quad (0.0\%) \quad (1 \text{ count})
\end{aligned}$$

Mitigated Probabilities

$$\begin{aligned}
P_{\text{mitigated}}(1111) &= 1.0816936 \\
P_{\text{mitigated}}(1110) &= -0.024201097 \\
P_{\text{mitigated}}(1011) &= -0.019141676 \\
P_{\text{mitigated}}(1101) &= -0.008984862 \\
P_{\text{mitigated}}(0111) &= -0.031229032 \\
P_{\text{mitigated}}(1001) &= 0.00048916455 \\
P_{\text{mitigated}}(1100) &= 0.00034177073 \\
P_{\text{mitigated}}(1010) &= 0.00043788625 \\
P_{\text{mitigated}}(0011) &= 0.00059428706
\end{aligned}$$

Entanglement Entropies

$$S(\rho_{\text{omniverse}}) = 3.1856 \text{ bits}$$
$$S(\rho_{\text{bell}}) = 4.0000 \text{ bits}$$

All Raw Probabilities

$$P_{\text{raw}}(1111) = 0.9673$$
$$P_{\text{raw}}(1011) = 0.0106$$
$$P_{\text{raw}}(1101) = 0.0081$$
$$P_{\text{raw}}(1110) = 0.0077$$
$$P_{\text{raw}}(0111) = 0.0055$$
$$P_{\text{raw}}(1001) = 0.0004$$
$$P_{\text{raw}}(1100) = 0.0002$$
$$P_{\text{raw}}(0011) = 0.0001$$
$$P_{\text{raw}}(1010) = 0.0001$$

All Mitigated Probabilities

$$P_{\text{mitigated}}(1111) = 1.0816936$$
$$P_{\text{mitigated}}(1110) = -0.024201097$$
$$P_{\text{mitigated}}(1011) = -0.019141676$$
$$P_{\text{mitigated}}(1101) = -0.008984862$$
$$P_{\text{mitigated}}(0111) = -0.031229032$$
$$P_{\text{mitigated}}(1001) = 0.00048916455$$
$$P_{\text{mitigated}}(1100) = 0.00034177073$$
$$P_{\text{mitigated}}(1010) = 0.00043788625$$
$$P_{\text{mitigated}}(0011) = 0.00059428706$$

Correlations

LHC Correlation

$$r = 0.984$$
$$p\text{-value} = 0.0023$$

Gravitational Wave (GW) Correlation

$$r = 0.009$$
$$p\text{-value} = 0.9888$$

Expected Measurement Outcome

$$P_{\text{raw}}(0000001111) = 0.9586 \quad (95.9\%) \quad (9586 \text{ counts})$$
$$P_{\text{raw}}(0000001110) = 0.0114 \quad (1.1\%) \quad (114 \text{ counts})$$
$$P_{\text{raw}}(0000001101) = 0.0074 \quad (0.7\%) \quad (74 \text{ counts})$$
$$P_{\text{raw}}(0000001011) = 0.0058 \quad (0.6\%) \quad (58 \text{ counts})$$
$$P_{\text{raw}}(0000101111) = 0.0014 \quad (0.1\%) \quad (14 \text{ counts})$$
$$P_{\text{raw}}(0100001111) = 0.0020 \quad (0.2\%) \quad (20 \text{ counts})$$
$$P_{\text{raw}}(1000001111) = 0.0014 \quad (0.1\%) \quad (14 \text{ counts})$$
$$P_{\text{raw}}(0000000111) = 0.0066 \quad (0.7\%) \quad (66 \text{ counts})$$
$$P_{\text{raw}}(0010001111) = 0.0019 \quad (0.2\%) \quad (19 \text{ counts})$$
$$P_{\text{raw}}(0000011111) = 0.0018 \quad (0.2\%) \quad (18 \text{ counts})$$
$$P_{\text{raw}}(0000011011) = 0.0001 \quad (0.0\%) \quad (1 \text{ count})$$
$$P_{\text{raw}}(0001001111) = 0.0010 \quad (0.1\%) \quad (10 \text{ counts})$$
$$P_{\text{raw}}(0000001001) = 0.0002 \quad (0.0\%) \quad (2 \text{ counts})$$
$$P_{\text{raw}}(0000000110) = 0.0001 \quad (0.0\%) \quad (1 \text{ count})$$
$$P_{\text{raw}}(0100001110) = 0.0001 \quad (0.0\%) \quad (1 \text{ count})$$
$$P_{\text{raw}}(0000001010) = 0.0001 \quad (0.0\%) \quad (1 \text{ count})$$
$$P_{\text{raw}}(0100001011) = 0.0001 \quad (0.0\%) \quad (1 \text{ count})$$