

1. CLARIFICATIONS AND ERRATA

- (1) On pg. 3, in Definition 1.4, the Markov trace is NOT an algebra homomorphism from $TL_n(A)$ to \mathbb{F} . The author thanks Prof. Kodiyalam for pointing it out.
- (2) On page 11, line 3 below the graph, “transversal to the x -direction,” Here “ x -direction” should be replaced by “ y -direction”, i.e., the vertical axis.
- (3) On page 20 line 13 from the bottom in Theorem 1.31 item (3) “which splits only when n is even.” Here “even” should be replaced by “odd”.
- (4) On pg. 26, in the second line after Figure 2.1, “we have efficient classical algorithms to give us quantum circuits for U_x . More precisely, “we have poly(n)-classical algorithms to output descriptions of quantum circuits for U_x , where n is the number of qubits.”
- (5) On pg. 30, the inclusion of the gate $\sigma_z^{-1/4}$ is redundant.
- (6) On pg. 32, $\sum_{|I| \neq |f(x)z|} |a_I|^2 \leq 1/4$ should be added into definition 2.10.
- (7) On pg. 38, in Thm 3.7, the phrase “efficient classical algorithm” has a similar meaning as above.
- (8) On pg. 53, in the Verlinde formula for N_{ij}^k in (1) of Thm.4.27, the denominator should be just s_{1r} .
- (9) On pg. 104: delete one “and”

2. ADDED REFERENCES

- (1) On pg. 95, after Theorem 7.6, a sentence for reference should be added: This Theorem first appeared in [Wright]: Wright, G., The Reshetikhin-Turaev representation of the mapping class group. J. Knot Theory Ramifications 3 (1994), no. 4, 547-574.
- (2) On pg. 113, reference [GATLTW] appeared in 2009 and [GTKLT] missed one author.

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