Abstract Submitted for the MAR16 Meeting of The American Physical Society

Details of [[7,1,3]] **Syndrome Measurements** YAAKOV WEIN-STEIN, MITRE — We explore different aspects of syndrome measurements (SM) for the [[7,1,3]] quantum error correction code. This includes determining how often to apply SM, comparing the performance of different SM, rearranging the order in which SM are applied, and exploring the effects of improving SM ancilla state construction. Finally, we attempt to formulate gates and their attached SM as superoperators.

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