

Abstract Submitted
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A general approach to two qubit gate construction for coupled-qubit models EMILY PRITCHETT, MICHAEL GELLER, University of Georgia
— We describe a practical approach for two-qubit gate construction and apply it to a general model of weakly coupled qubits. The procedure involves generating gates from a small set of primitive operations, then comparing their Makhlin invariants to those of the desired target gate. Several new CNOT implementations are found using this method.

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