

Abstract Submitted  
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**Transient entanglement generation and control in few-photon bidirectional multiqubit chiral waveguide QED**<sup>1</sup> IMRAN M. MIRZA, Physics department, University of Michigan, Ann Arbor, USA., JOHN C. SCHOTLAND, Department of Mathematics and Department of Physics, University of Michigan, Ann Arbor, USA. — By driving and applying few-photon Fock state master equation, we investigate the generation and manipulation of multiqubit entanglement in bidirectional waveguide QED. In particular, we focus on how preferential photonic emission directions in the waveguide (chirality) can maximize the generated transient entanglement as compared to the non-chiral settings [Imran M. Mirza and John C. Schotland, Phys. Rev. A 94, 012302 and 012309 (2016)].

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