1145-81-680   **Anna Vershynina*** (`anna@math.uh.edu`), Philip Guthrie Hoffman Hall, Department of Mathematics, University of Houston, Houston, TX 77204. *How fast can entanglement be generated in quantum systems?*

We investigate the maximal rate at which entanglement can be generated in bipartite quantum systems. The goal is to upper bound this rate. All previous results in closed systems considered entanglement entropy as a measure of entanglement. I will present recent results, where entanglement measure can be chosen from a large class of measures. The result is derived from a general bound on the trace-norm of a commutator, and can, for example, be applied to bound the entanglement rate for Renyi and Tsallis entanglement entropies. At the end I will quickly review the generalization of the problem to open systems. (Received September 12, 2018)