1171-94-148 Rafael G. L. D'Oliveira^{*} (rafaeld@mit.edu), Salim El Rouayheb, Daniel Heinlein and Roberto A. Machado. More Servers, Less Communication, for Secure Distributed Matrix Multiplication.

We consider the problem of communication efficient secure distributed matrix multiplication. The previous literature has focused on reducing the number of servers as a proxy for minimizing communication costs. The intuition being, that the more servers used, the higher the communication cost. We show that this is not the case by presenting schemes that by contacting more servers are able to lower the total communication cost. (Received August 09, 2021)