1145-81-1527   **Zhengfeng Ji**, **Debbie Leung*** (`wcleung@uwaterloo.ca`) and **Thomas Vidick**. *Bell inequality that cannot be maximally violated with finite amount of entanglement.* Preliminary report.

We present a Bell inequality on three systems with very few measurement settings and outcomes, such that no finite amount of entanglement distributed among these systems can lead to a maximum violation of the Bell inequality. This result is based on the coherent state exchange game introduced in arXiv:0804.4118, which in turns is based on embezzlement of entanglement due to van Dam and Hayden (arXiv:quant-ph/0201041).

Joint work with Zhengfeng Ji and Thomas Vidick, arXiv:1802.04926 . (Received September 22, 2018)