



# Quantum Computing Seminar

## Trading classical and quantum resources

By

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**Abstract:** The stabilizer rank of a pure quantum state is defined as the smallest integer  $m$  such that it can be expressed as a superposition of  $m$  stabilizer states. Combined with the magic states introduced by Bravyi and Kitaev, such a notion becomes especially useful because one can analyze the complexity of circuits composed of Clifford+T gates in terms of the stabilizer rank of the magic input state, which can be taken to be  $m$  tensor factors of the T magic state.

References: arXiv:1506.01396

**Date:** Friday, April 14, 2023

**Time:** 14:30

**Place:** SA141 - Mathematics Seminar Room & ZOOM

To request the event link, please send a message to [selman.ipek@bilkent.edu.tr](mailto:selman.ipek@bilkent.edu.tr)