

Quantum Computing Seminar

Graph-theoretical contextuality II

By

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Abstract: We continue our review of "A combinatorial approach to nonlocality and contextuality", by Acín, Fritz, Leverrier and Sainz (2012). Classical and non-signalling correlations in contextuality scenarios are described with two graph invariants of the graph capturing the compatibility between the outcomes. While quantum correlations can be approximated with graph invariants, a full characterisation requires the contextuality hypergraph. Remarkably, such characterisation can be achieved with a complete hierarchy of outer approximations corresponding with semidefinite programs.

Date: Apr 8, Tuesday Time: 17:30 UTC+3

Place: ZOOM

To request the event link, please send a message to cihan.okay@bilkent.edu.tr