
HANMENG ZHAN, York University

Discrete quantum walks on Cayley graphs

Quantum walks are tools for designing quantum circuits and algorithms. Among all graphs studied in continuous quantum walks, Cayley graphs have received considerable attention, as the group structures provide convenient formulas for the spectra of the walks. In this talk, I will consider certain types of discrete quantum walks, which can also be studied analytically when the underlying graph is a Cayley graph. Some open problems in this less understood area will be presented.