

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, October 10
3:00 – 4:00 PM
Maria Sanford, Room 101

EARLY STATE EXCLUSION IN QUANTUM SPIN CHAINS

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Abstract: The subject of transferring a quantum state from one location to another within a quantum computer with probability one (a phenomenon called Perfect State Transfer) has gained much interest from the mathematical community. In order to study how to speed up the transfer of several qubits, I will introduce the notion of Early State Exclusion and utilize theory from orthogonal polynomials to prove that there exist infinitely many Hamiltonians which exhibit this behavior. I will also describe some related open problems. No prior knowledge in quantum computing and orthogonal polynomials is needed to attend this talk.

To join us online use the following link: <https://ccsu.webex.com/meet/gotchev>
For further information: gotchevi@ccsu.edu; 860-832-2839;
<http://mathcolloquium.sites.ccsu.edu/>