

**CCSU**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

# COLLOQUIUM

Friday, October 1  
3:00 – 4:00 PM  
Maria Sanford, Room 101

## **CLIFFORD STATES FOR UP TO FIVE QUBITS**

**FREDERIC LATOUR**

**CENTRAL CONNECTICUT STATE UNIVERSITY**

**Joint work with Oscar Perdomo**

**Abstract:** We study the set of Clifford states, which is the set of vectors that can be reached from a certain starting point through multiplication by the matrices that form a group known as the Clifford group.

These concepts are useful in the study of quantum computing. The goal is to determine the number of Clifford states, to divide them into a number of easily understood equivalence classes, and to examine the relationship between the equivalence classes.

**To join us online use the following link:**

<https://ccsu.webex.com/meet/gotchev>

**For further information:**

[gotchevi@ccsu.edu](mailto:gotchevi@ccsu.edu) 860-832-2839

<http://www.math.ccsu.edu/gotchev/colloquium/>