

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES
COLLOQUIUM

Friday, April 26
3:00 – 4:00 PM
Maria Sanford, Room 101

**BEING IN CONTROL:
EXPLORING CONTROL THEORY**

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Abstract: In this colloquium talk, we will discuss control theory, beginning with examples of open-loop and closed-loop control systems. We will then explore optimal control theory, a powerful framework for manipulating systems described by differential equations to meet specific performance criteria while respecting physical constraints. Utilizing Pontryagin's Maximum Principle, we will derive optimal control strategies. As an illustrative example, we will discuss a cruise control system.

The talk is accessible for undergraduate students.

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/>