CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

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

COMPRESSIVE SENSING AND THE DISCRETE COSINE TRANSFORM

BRODY JOHNSON

SAINT LOUIS UNIVERSITY

ONLINE PRESENTATION

<u>Abstract</u>: The talk will begin with an introduction to compressive sensing, an area of mathematics that focuses on the representation and recovery of sparse vectors using a small number of linear measurements. Following the introduction, a well-known sparse recovery algorithm based on the discrete Fourier transform will be reviewed. The talk will culminate with a discussion of a related algorithm based on the discrete cosine transform. This presentation is based on a joint work with a recent master's student, Benjamin Barros.

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