CCSU DEPARTMENT OF MATHEMATICAL SCIENCES COLLOQUIUM

Friday, December 2 3:00 – 4:00 PM Maria Sanford, Room 101

COUNTING PROBLEMS INVOLVING NECKLACES

FREDERIC LATOUR

CENTRAL CONNECTICUT STATE UNIVERSITY

<u>Abstract:</u> Consider the following problem: "How many different necklaces of 8 beads can be formed using 4 red beads and 4 black beads?" This problem can be solved by drawing all possible necklaces and counting them. However, the generalization to the case of a necklace of *n* black beads and *n* red beads is more challenging. In this talk, I will discuss the history of this problem and its solutions, and its connections with a famous theorem of Number Theory and a game played by the Māori people of New Zealand.

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