CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, April 11 3:00 – 4:00 PM Maria Sanford, Room 101

PYTHON FOR MATH: WORKING WITH POLYNOMIALS

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<u>Abstract:</u> This talk is for anyone who wants an introduction about what the programming language, Python, can do with mathematics. The main theme is working with polynomials including examples of graphing, factoring, fitting linear regression models, and looking at the conditions when a cyclotomic polynomial composed with x^n is irreducible. The focus is on seeing examples of Python code doing mathematical manipulations that a math student could do such as testing when an integer factors into a product of exactly two primes. Finally, some math trivia is included like noting Jiro Suzuki's 1987 paper, "On Coefficients of Cyclotomic Polynomials," which proves that every integer is a coefficient of some cyclotomic polynomial.

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