## CCSU department of mathematical sciences COLLOQUIUM

Friday, October 29 3:00 – 4:00 PM Maria Sanford, Room 101

## **ON THE INFINITUDE OF PRIMES**

## **IVAN GOTCHEV**

## **CENTRAL CONNECTICUT STATE UNIVERSITY**

<u>Abstract:</u> There are many known proofs of the infinitude of prime numbers. Some of them are elementary and some are not. Recently I was able to find, I believe, a new elementary proof of the infinitude of primes. It was inspired by a proof by Erdős of one of Euler's theorem that is contained in the book "Proofs from The Book" by M. Aigner and G. M. Ziegler. Before presenting that proof, I will say a few words about Erdős and the above-mentioned book. I will also recall some well-known proofs of the infinitude of primes and some of their generalizations and applications. Some conjectures will be mentioned, as well.

The entire lecture will be accessible for everyone who loves mathematics.

To join us online use the following link:

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

For further information: <u>gotchevi@ccsu.edu</u> 860-832-2839 http://www.math.ccsu.edu/gotchev/colloquium/