CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, May 5
3:00 – 4:00 PM
Maria Sanford, Room 101

UNIVERSAL ALGEBRA AND LIMITING DENSITIES

JOHANNA FRANKLIN

HOFSTRA UNIVERSITY

Abstract: In universal algebra, an algebraic variety is a class of structures whose axioms are all universal (like groups in the language with multiplication, inverse, and identity). One of the questions we can ask about the behavior of members of an algebraic variety is whether a particular fact is true in almost all of them. We'll define this concept formally using the idea of limiting densities, and then we'll talk about situations where a variety satisfies the *zero-one* law: every sentence you can state using the language of the variety either has limiting density 0 or limiting density 1, and nothing in between.

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/