

Cleveland State
University
College of Science



COLLOQUIUM

Alexandra Seceleanu

Associate Professor

Department of Mathematics

University of Nebraska-Lincoln

Symmetric Monomial Ideals

Friday March 10th at 2:30pm in RT 1516

Bio: Alexandra Seceleanu received her Ph.D. degree in Mathematics from the University of Illinois, Urbana-Champaign in 2005. In 2002, she was a Postdoctoral Researcher at the Norwegian University of Science and Technology. From 2011-2015 she was a postdoctoral researcher at the University of Nebraska-Lincoln. She is currently an Associate Professor at the Department of Mathematics at the University of Nebraska-Lincoln. Her research interests include commutative algebra and algebraic geometry, with emphasis on computational homological methods and their connections to algebraic geometry.

Abstract: Monomials are single term polynomials in several variables and ideals are a convenient way of organizing them into algebraic structures. The talk will illustrate quite literally, by means of pictures, how monomials build bridges between algebra, geometry and combinatorics. We will explore this idea by focusing on what it means for a monomial ideal to exhibit symmetry with respect to a few different groups. This leads to the notion of symmetric strongly sifted ideals, which we study in joint work with Alessandra Costantini.

Refreshments will be served in RT 1517 at 2:10pm