Cleveland State University
College of Science

COLLOQUIUM

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Professor

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Q-Borel Ideals

Friday October 16th at 3pm on Zoom

https://csuohio.zoom.us/j/81736297103?pwd=Q3F5VGM2UlFlWk1LQlk5bjRVdmRWQT09
Meeting ID: 817 3629 7103
Password: 439254

Bio: Prof. Sarmiento Rosales received his Ph.D. in Mathematics from CINVESTAV IPN, Mexico, in 2012. His dissertation focused parameterized codes. Currently, he is professor in the Instituto Politecnico Nacional in Mexico. His research focuses on Coding Theory, Algebraic Geometric Codes, Computational Algebra, and using Algebraic methods to solve computing problems.

Abstract: Fix a poset Q on $\{x_1,...,x_n\}$. A Q-Borel monomial ideal $I \subseteq K[x_1,...,x_n]$ is a monomial ideal whose monomials are closed under the Borel-like moves induced by Q. A monomial ideal I is a principal Q-Borel ideal, denoted $I = Q(m)$, if there is a monomial m such that all the minimal generators of I can be obtained via Q-Borel moves from m. We study powers of principal Q-Borel ideals, we show that all powers of Q(m) agree with their symbolic powers, and that the ideal Q(m) satisfies the persistence property for associated primes.