

College of Arts and Sciences
Department of Mathematics
University of South Carolina

Math Colloquium

Topological Viewpoints on Algebraic Complexity

Daniel Krashen, Rutgers University/University of Georgia



Thursday
February
22nd

4:30 PM
LeConte 412

Understanding algebraic structures such as Galois extensions, quadratic forms and division algebras, can give important insights into the arithmetic of fields. In this talk, I will discuss recent work showing ways in which the arithmetic of certain fields can be partially described by topological information. I will then describe how these observations lead to arithmetic versions of the Meyer-Vietoris sequences, the Seifert–van Kampen theorem, and examples and counterexamples to local-global principles.