

Commutative Algebra Seminar

Bernstein-Sato polynomials over \mathbb{Z}/p^m

Eamon Quinlan-Gallego (University of Michigan)

Abstract: The Bernstein-Sato polynomial of a holomorphic function is an invariant that originated in complex analysis, and with now strong applications to birational geometry and singularity theory over the complex numbers. For example, it detects the log-canonical threshold as well as the eigenvalues of the monodromy action on the cohomology of the Milnor fibre. In this talk I will present an analogue of this invariant for polynomials with \mathbb{Z}/p^m coefficients and explain some connections to the characteristic-0 theory. This is joint work with T. Bitoun.

Wednesday, February 24 at 4:00 PM in Zoom