

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Wenliang Zhang
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Date: Tuesday, April 12, 2022

Time: 2:30 PM

Location: 258 Hurley Hall

Zoom URL: NA

Lecture Title:

Matlis duals of local cohomology modules

Abstract

The study of Matlis duals of local cohomology modules has gained momentum in recent years, due to the work of Hellus, Hartshorne-Polini, Lyubeznik-Yildirim, etc. In this talk, I will discuss some recent results concerning the Lyubeznik-Yildirim conjecture, which asserts: Let R be a regular local ring and I be an ideal. If $H^i_I(R)$ is non-zero, then the support of its Matlis dual is $\text{Spec}(R)$.