

## Commutative Algebra Seminar

*Mixed Hodge structure on local cohomology with support in determinantal varieties*

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**Abstract:** Given a subvariety  $Z$  in affine space, the local cohomology modules with support in  $Z$  are mixed Hodge modules. This implies that each local cohomology module is endowed with two filtrations subtly encoding the singularities of  $Z$ : the Hodge filtration and the weight filtration. We will discuss new calculations of these filtrations in the case when  $Z$  is a generic determinantal variety. Joint work with Claudiu Raicu.

Wednesday, March 31 at 4:00 PM in Zoom