1171-13-62   **Michael Perlman*** (`mp174@queensu.ca`) and **Claudiu Raicu** (`craicu@nd.edu`). *Mixed Hodge structure on local cohomology with support in determinantal varieties.*

Given a closed subvariety Z in a smooth complex variety, the local cohomology modules with support in Z are functorially endowed with structures as mixed Hodge modules, implying that they are equipped with Hodge and weight filtrations that subtly measure the singularities of Z. We will discuss new calculations of these filtrations in the case when Z is a generic determinantal variety. As an application, we obtain the Hodge ideals for the determinant hypersurface. Joint work with Claudiu Raicu. (Received August 07, 2021)