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**András C Lőrincz\*** (alorincz@purdue.edu), Department of Mathematics, Purdue University, W Lafayette, IN 47907, and **Claudiu Raicu**. *Iterated local cohomology groups and Lyubeznik numbers for determinantal rings.*

We present a recipe for determining iterated local cohomology groups with support in ideals of minors of a generic matrix in characteristic zero, expressing them as direct sums of indecomposable  $\mathcal{D}$ -modules. For non-square matrices these indecomposables are simple, but this is no longer true for square matrices where the relevant indecomposables arise from the pole order filtration associated with the determinant hypersurface. Specializing our results to a single iteration, we determine the Lyubeznik numbers for all generic determinantal rings, thus answering a question of Hochster. (Received September 16, 2018)