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Alexander Lazar* (alazar@math.miami.edu) and **Michelle L Wachs**

(wachs@math.miami.edu). *On the Intersection Lattice of the Homogenized Linial Arrangement.*

The homogenized Linial arrangement is a real hyperplane arrangement that was introduced by Hetyei in 2017. Using the finite field method, Hetyei established a recurrence for the number of regions of this arrangement and showed that it is a median Genocchi number.

In this talk we will refine and extend of Hetyei's result by studying the intersection lattice of this arrangement. We will give a combinatorial interpretation of the coefficients of the characteristic polynomial of this arrangement, as well as a generating function formula for the characteristic polynomial.

Time permitting, we will discuss generalizations of the homogenized Linial arrangement and extensions of our results to this more general setting. (Received September 09, 2019)