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**Irina Georgeana Iliaea\*** ([irina.iliaea@lsus.edu](mailto:irina.iliaea@lsus.edu)). *On the Frobenius Complexity of Stanley-Reisner Rings and Monomial Ideals.*

The Frobenius complexity of a local ring  $R$  measures asymptotically the abundance of Frobenius actions of order  $e$  on the injective hull of the residue field of  $R$ . It is known that, for Stanley-Reisner rings, the Frobenius complexity is either  $-\infty$  or 0. This invariant is determined by the complexity sequence  $\{c_e\}_e$  of the ring of Frobenius operators on the injective hull of the residue field. Our main result shows that  $\{c_e\}_e$  is constant for  $e \geq 2$ , generalizing work of Álvarez Montaner, Boix and Zarzuela. Moreover, we will show how these results can be extended to the case of monomial ideals. (Received January 18, 2021)