1163-13-868 Irina Georgeana Ilioaea* (irina.ilioaea@lsus.edu), Louisiana State University in Shreveport, One University Place, Shreveport, LA 71115. On the Frobenius Complexity of Stanley-Reisner Rings.

The Frobenius complexity of a local ring R measures asymptotically the abundance of Frobenius operators 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. We will show that $\{c_e\}_e$ is constant for $e \ge 2$, generalizing work of Àlvarez Montaner, Boix and Zarzuela. Our result settles an open question mentioned by Àlvarez Montaner in one of his papers. (Received September 13, 2020)