About entropy in B-free subshifts

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For a set $\mathcal{B} \subseteq \mathbb{N}$, let η denote the characteristic sequence of $\mathcal{B}$-free numbers. Its orbit closure is a 0-1-subshift X_η, called the $\mathcal{B}$-free subshift. I will present results from joint work with Aurelia Dymek and Joanna Kułaga-Przymus [2] about the entropy of X_η. A central object for this is the Toeplitz sequence η^* that generates the unique minimal component of X_η. If η^* is regular, we obtain results that are analogous to the ones already known in the hereditary case. Our main tool is, that for taut $\mathcal{B}$ the elements of X_η can be described as sequences "between η^* and η" by a result of Gerhard Keller [1].

References

[1] Keller, Gerhard. Generalized heredity in $\mathcal{B}$-free systems. *Stoch. Dyn. 21*, 3 (2021), Paper No. 2140008, 19.

[2] Dymek, Aurelia and Kułaga-Przymus, Joanna, and Sell, Daniel. Invariant measures for $\mathcal{B}$-free systems revisited. *Ergodic Theory Dynam. Systems*, published online 2024:1-32. doi:10.1017/etds.2024.7.