1167-13-206 **Louiza Fouli*** (`lfouli@nmsu.edu`), **Huy Tài Hà** and **Susan Morey**. *Constructing regular sequences on powers of monomial ideals.* Preliminary report.

Let R be a polynomial ring and I a homogeneous ideal in R. In previous work we gave a construction of sequences on monomial ideals, called initially regular sequences, that provided lower bounds on the depth of R/I. We will discuss certain types of initially regular sequences that turn out to be regular sequences. Moreover, we extend previous results and obtain lower bounds on depth R/I^t for $t \geq 2$. This is joint work with Huy Tài Hà and Susan Morey. (Received March 07, 2021)