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Louiza Fouli* (lfouli@nmsu.edu), **Huy Tài Hà** and **Susan Morey**. *Regular sequences on powers of monomial ideals*. Preliminary report.

Let R be a polynomial ring and I a monomial ideal in R . We construct certain types of regular sequences on R/I that give effective bounds on the depth of R/I . Moreover, we will discuss when these sequences remain regular sequences on R/I^t and give lower bounds on depth R/I^t for $t \geq 2$. This is joint work with Huy Tài Hà and Susan Morey. (Received January 15, 2021)