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Louiza Fouli* (lfouli@nmsu.edu), Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003, and **Susan Morey** and **Tài Hà**. *Initially regular sequences*. Preliminary report.

For an arbitrary ideal I in a polynomial ring R we define a new notion of initially regular sequences on R/I . These sequences share properties with regular sequences, and are relatively easy to construct using information obtained from the initial ideal of I . We will discuss situations where initially regular sequences are also regular sequences. These new sequences also give a lower bound on the depth of R/I and we will provide a concrete description of these sequences that often realize the bound. This is joint work with Tài Hà and Susan Morey. (Received January 04, 2019)