Abstract Submitted for the MAR16 Meeting of The American Physical Society

Mechanical Feedback and Arrest in Gene Expression STUART SE-

VIER, HERBERT LEVINE, Rice Univ — The ability to watch biochemical events at the single-molecule level has increasingly revealed that stochasticity plays a leading role in many biological phenomena. One important and well know example is the noisy, "bursty" manner of transcription. Recent experiments have revealed relationships between the level and noise in gene expression hinting at deeper stochastic connections. In this talk we will discuss how the mechanical nature of transcription can explain this relationship and examine the limits that the physical aspects of transcription place on gene expression.

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Date submitted: 06 Nov 2015 Electronic form version 1.4