Abstract Submitted for the OSF05 Meeting of The American Physical Society

Elasticity of a Rubber Band Model ULRICH ZURCHER¹, LORIN WOODFORD, Physics Dept., Cleveland State University — We study the two-state model proposed for the stretching of DNA. We study the stretching at low force. We consider the case of long-range interactions between spins. We show results for long chains obtained using the Ohio Supercomputer [OSC]. We discuss the elastic modulus of the chains in the presence of long-range interactions.

¹corresponding author

Ulrich Zurcher Cleveland State University

Date submitted: 22 Sep 2005 Electronic form version 1.4