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Joonhyun La* (joonhyun@stanford.edu), Department of mathematics, Building 380, Stanford, CA 94305. *Global well-posedness of strong solutions of Doi model with large viscous stress.*

We study models of dilute rigid rod-like polymer solutions. We establish the global wellposedness the Doi model for large data, and for arbitrarily large viscous stress parameter. The main ingredient in the proof is the fact that the viscous stress adds dissipation to high derivatives of velocity. (Received February 06, 2021)