





Model Parameters:

 $L = \text{filament length } (\mu \, \text{m})$

 μ_e = extensional modulus (nN)

 μ_c = extensional modulus (nN) ξ = inter-filament friction (nN•s) $l_c = \text{cross-link spacing } (\mu \text{ m})$

v = active filament force (nN) $\phi = \text{cross-link active fraction}$

 φ = cross-link active fraction $\tau_{\rm r}$ = filament recycling time (s)

 $\zeta = \text{medium viscosity } (\text{nN} \cdot \text{s}/\mu \text{m})$