





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)

 ϕ = cross-link active fraction

 τ_r = filament recycling time (s) ζ = medium viscosity (nN•s/ μ m)