

SIF40AH/DIF4997  
**Nano-particle and polymer physics I**  
**EXERCISE 9**

Find the Smoluchowski equation of a rigid, rodshaped polymer placed in a simple shear velocity field. Assume that the problem is two-dimensional.

Hint: See lecture notes "Molekylær biofysikk", Ch. 9.3 ("Strømningsindusert dobbeltbrytning")