

Erratum

G. Vertogen, The Equations of Motion for Nematics, *Z. Naturforsch.* **38 a**, 1273 [1983].

The equations of motion (1.9) must read

$$\frac{d}{dt} \left(\frac{\partial T}{\partial \dot{\theta}} \right) - \frac{\partial T}{\partial \theta} = - \frac{\partial D}{\partial \dot{\theta}} - F_{\text{el}, \theta}, \quad \frac{d}{dt} \left(\frac{dT}{d\dot{\varphi}} \right) = - \frac{\partial D}{\partial \dot{\varphi}} - F_{\text{el}, \varphi},$$

where $\frac{\partial D}{\partial \dot{\theta}}$ and $\frac{\partial D}{\partial \dot{\varphi}}$ are generalized frictional forces, whereas $F_{\text{el}, \theta}$ and $F_{\text{el}, \varphi}$ are generalized elastic forces given by

$$F_{\text{el}, \theta} = \frac{\partial F_{\text{el}}}{\partial \theta} - \partial_x \frac{\partial F_{\text{el}}}{\partial \partial_x \theta}, \quad F_{\text{el}, \varphi} = \frac{\partial F_{\text{el}}}{\partial \varphi} - \partial_x \frac{\partial F_{\text{el}}}{\partial \partial_x \varphi},$$

with F_{el} denoting the Frank distortion free energy density.