

## **Elastic energies for nematic elastomers**

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We present two fully nonlinear elastic energies for nematic elastomers and their small strain expansions (both in the regime of small strains and large director rotations, and in the case where both strains and director changes are small). We compare the behavior they predict with the currently available experimental evidence, and discuss their relation with other models recently proposed in the theoretical literature.

on joint work with L. Teresi [1].

References

[1] A. De Simone, L. Teresi: Elastic energies for nematic elastomers, European Physical Journal E, in press (2009).