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**Patricia Bauman\*** (bauman@math.purdue.edu) and **Daniel Phillips**. *Properties of Eigenvalues for Minimizers to Landau-de Gennes energies in Two and Three Space Dimensions.*

We present results on properties of minimizers of Landau-de Gennes energies defined on tensor-valued functions in two- or three- dimensional domains that are constrained to symmetric  $3 \times 3$  matrices with eigenvalues in  $[-1/3, 2/3]$ . It is shown that under mild assumptions, the eigenvalues for minimizers stay strictly between the values of  $-1/3$  and  $2/3$  which are considered to be unphysical. (Received January 31, 2017)