

On the general Ericksen-Leslie model in the anisotropic case

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We consider the general isothermal Ericksen-Leslie Model in the anisotropic case, i.e., with the full Ericksen tensor. Assuming that the Frank coefficients are only positive, we prove the existence and uniqueness of a strong solution in the full space \mathbb{R}^3 having optimal L_p - L_q -regularity. This is a joint work with M. Hieber and J. Li.