

A note on Liouville theorem for steady Q-tensor system of liquid crystal

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Abstract

We study the Liouville theorem for steady Q-tensor system of liquid crystal in \mathbb{R}^3 . Assuming that $u \in L^{\frac{9}{2}}, \dots, \cap H^2(\mathbb{R}^3)$ and $Q \in H^2(\mathbb{R}^3)$, we show that the steady system admits only trivial solution $u=0, Q=0$.

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