CORRELATION OF ORDER PARAMETER FLUCTUATIONS IN THE ISOTROPIC PHASE OF A LIQUID CRYSTAL

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S u m m a r y

A nonsingular approximation for the pair correlation function of order parameter fluctuations for the isotropic phase of a liquid crystal under the space limitation is found. The influence of the space limitation and interaction with the surface on the correlation length are considered for a system with the geometry of a plane-parallel layer. The shift of the temperature of the phase transition is calculated, and its dependence on the thickness of the layer and interaction with the surface of such a system is investigated.