ANGULAR POLARIZATION STRUCTURE OF LIGHT TRANSMITTED THROUGH A HOMEOTROPIC NEMATIC CELL

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S u m m a r y

The polarization structure of light transmitted through a homeotropic cell filled with a nematic liquid crystal (NLC) has been found to be characterized by the availability of polarization singularities which arise owing to the interference of characteristic modes in the anisotropic substance. Stokes polarimetry has been used to measure the polarization-resolved conoscopic images. For a homeotropic cell, the parameters of polarization singularities in the angular distributions of polarization ellipses have been calculated analytically. The results of theoretical calculations agree well with experimental data.