

Diploma thesis abstract

*Polarization singularities of electromagnetic field
near surface of nanoobjects of different shape*

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Regimentation of topological singularities of three dimensional electromagnetic vector fields polarization has been systematized and adjusted in the work. A method of their location in a numeric experimental data has been proposed and its results are shown on two near field models. Behaviour of polarization singularities near a metal spheroid in dependency on the incident field polarization parameters and near a metamaterial in dependency on the incident field wavelength is described