

LightTrans' Talk at EOS Topical Meeting on Diffractive Optics 2019

Physical-Optics Anatomy of the Gouy Phase Shift

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Abstract

Using purely mathematical arguments in an electromagnetic approach to the propagation from one side of the focus to the other, we obtain a physical-optics solution which reveals, in an isolated manner, all the effects which we know must appear, and dispel the geometrical-physical optics dichotomy in our understanding of the Gouy phase.