

Abstract Submitted  
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**Structure and Symmetry in Coherent Perfect Polarization Rotation** MICHAEL CRESCIMANNO, CHUANHONG ZHOU, JAMES ANDREWS, MICHAEL BAKER, Dept. of Physics, Youngstown State University — Theoretical investigation of different routes to coherent perfect polarization rotation illustrates its phenomenological connection with coherent perfect absorption, a.k.a. The anti-laser. Analysis of the effects of parity breaking, layering, combining Faraday rotation and optical activity, and a rotator-loaded optical cavity serve to sharpen the contrast between these phenomena. These comparisons may be useful in suggesting new approaches to common optical devices and identifying promising routes to their miniaturization.

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