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Coherent perfect rotation theory: connections with, and consequences beyond, the anti-laser MICHAEL CRESCIMANNO, JAMES ANDREWS, CHUANHONG ZHOU, MICHAEL BAKER, Department of Physics and Astronomy, Youngstown State University — Coherent Perfect Rotation (CPR) phenomena are a reversible generalization of the anti-laser. By evaluating CPR in a broad variety of common optical systems, including optical cavities and DFB and DBR structures, we illustrate its unique threshold and resonance features. This study builds intuition critical to assessing the utility of CPR in optical devices, and we detail it in a concrete application.

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