

Iterative Phase Retrieval

by

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Abstract

Over 25 years of phase retrieval is reviewed. Application areas include astronomy, space-object imaging with both active-coherent and passive-incoherent illumination, wave-front and telescope-misalignment sensing, 3-D coherent imaging, and synthetic-aperture radar. Algorithmic approaches include modifications of the Gerchberg-Saxton algorithm such as the hybrid input-output algorithm, gradient-search error-minimization techniques, support estimation from autocorrelation support, phase diversity, and sharpness maximization algorithms

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