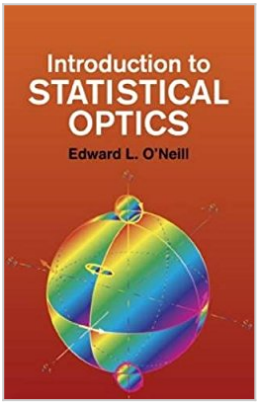

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By Edward L. O'Neill, Physics

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Chapters 1 and 2 present detailed descriptions of the role of Green's function in mathematical physics and the essential differences between spatial and time filters. Chapter 3 contains a brief review of the fundamental relations of paraxial optics, using compact and efficient matrix notation for the translation and refraction operations. Chapters 4, 5, and 6 describe the effects of various aberration terms on image formation from the standpoints of physical and geometrical optics. The final three chapters explore statistical methods, matrix and coherence theory, and the theory of partial polarization. Two valuable appendixes cover Fourier-Bessel series and integrals, and probability and entropy theory. 80 black-and-white illustrations.

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