

Errata for *Integrated Optomechanical Analysis*, Second Edition (PM223)

p. 42, Section 2.5: The first two paragraphs should read thus:

Perfect imaging requires point-to-point correspondence between the object points and the image points. The presence of optical aberrations in an optical system prevents this point-to-point correspondence and degrades the performance of optical systems. One form of optical system aberrations is chromatic aberrations that are caused by refractive index changes with wavelength. Axial and lateral color are examples of chromatic aberrations, as shown in Fig. 2.10, where the three wavelengths come to an image point at different axial (left) and lateral (right) locations.

Geometric aberrations are due to lens constructional parameters. Multiple elements and surfaces are often employed to minimize this class of aberration in a lens assembly. Simple geometric aberrations include tilt and defocus. Tilt places the image in the wrong orientation, and defocus places the image in the incorrect axial location. The higher-order aberrations create a distorted image and include spherical aberration, coma, astigmatism, distortion, and field curvature. Spherical aberration is the variation of focal length with aperture. For an image of an on-axis object point, rays at the edge of the pupil focus at a different point than rays near the axis as shown in Fig. 2.11.

p. 278 The number of the final reference entry should be 33.