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BOOK

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This treatise on *Active Optics Methods* describes the various developments of the concept since the origins, in the 1960's, up to the important development of the Giant Reflective Schmidt LAMOST, a segmented telescope built by China, whose best optical form to give to the primary mirror was established by the author.

*Astronomical Optics and Elasticity Theory* provides a very thorough and comprehensive account of what is known in this field. After an extensive introduction to optics and elasticity, the book discusses variable curvature, single mode and multimode deformable mirrors, as well as, in depth, active optics, its theory and applications. Further, optical design utilizing the Schmidt concept and various types of Schmidt correctors, as well as the elasticity theory and the aspherization of thin lenses, plates and shells are elaborated upon. Several *Active Optics Methods* are developed for obtaining aberration corrected diffraction gratings. Further, a weakly conical shell theory of elasticity is elaborated for the aspherization of grazing incidence telescope mirrors. The very didactic and fairly easy-to-read presentation of the topic will enable PhD students and young researchers to actively participate in challenging astronomical optics and instrumentation projects.

**Keywords »** Active Optics Methods - Aspherized Gratings - Aspherized Lenses - Aspherized Plates - Cycloid Forms - Deformable Mirrors - Elasticity Theory - Multimode Deformable Mirrors - Optical Aberrations - Optical Design - Single Mode Deformable Mirrors - Telescope Mirrors - Telescope Optics - Tulip Forms - Variable Curvature Mirrors - Vase Forms - X-Ray Telescopes - Zoom Mirrors

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