



Absolute instruments and perfect imaging in geometrical optics

Tomas Tyc, Lenka Herzanova, Martin Sarbort, Klaus Bering

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We investigate imaging by spherically symmetric absolute instruments that provide perfect imaging in the sense of geometrical optics. We derive a number of properties of such devices, present a general method for designing them and use this method to propose several new absolute instruments, in particular a lens providing a stigmatic image of an optically homogeneous region and having a moderate refractive index range.

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