

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

Gravitational lensing by 3-d matter distributions THOMAS

KLING, Bridgewater State College — Gravitational lensing studies have become an important tool for studying galactic structure and cluster morphology because the methods do not rely heavily on specific knowledge of cosmological parameters. To date, lensing studies use a weak- field, thin lens approximation where the lensing action is assumed to occur in a two-dimensional lens plane. We compare this approximation with the results of integrating the null geodesic equations for weak field metrics with “standard” three dimensional mass distributions.

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Date submitted: 13 Jan 2006

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