



All papers ▾

Go!

Astrophysics > Cosmology and Extragalactic Astrophysics

Intrinsic Shapes of Very Flat Elliptical Galaxies

D. K. Chakraborty, A. K. Diwakar, S. K. Pandey

(Submitted on 27 Oct 2010)

Photometric data from the literature is combined with triaxial mass models to derive variation in the intrinsic shapes of the light distribution of elliptical galaxies NGC 720, 2768 and 3605. The inferred shape variation is given by a Bayesian probability distribution, assuming a uniform prior. The likelihood of obtaining the data is calculated by using ensemble of triaxial models. We apply the method to infer the shape variation of a galaxy, using the ellipticities and the difference in the position angles at two suitably chosen points from the profiles of the photometric data. Best constrained shape parameters are found to be the short to long axial ratios at small and large radii, and the absolute values of the triaxiality difference between these radii.

Comments: Accepted in MNRAS

Subjects: **Cosmology and Extragalactic Astrophysics (astro-ph.CO)**

Cite as: **arXiv:1010.5685v1** [astro-ph.CO]

Submission history

From: Laxmikant Chaware [[view email](#)]

[v1] Wed, 27 Oct 2010 13:45:22 GMT (88kb)

[Which authors of this paper are endorsers?](#)

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

astro-ph.CO

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1010](#)

Change to browse by:

[astro-ph](#)

References & Citations

- [SLAC-SPIRES HEP](#)
([refers to](#) | [cited by](#))
- [NASA ADS](#)

Bookmark([what is this?](#))

