Cornell University Library

We gratefully acknowledge support from the Simons Foundation and member institutions

arXiv.org > astro-ph > arXiv:1107.1280

Search or Article-id

(Help | Advanced search)

All papers | Go!

Astrophysics > Cosmology and Extragalactic Astrophysics

SDSS J133401.39+331534.3: A New Subarcsecond Gravitationally Lensed Quasar

Cristian E. Rusu, Masamune Oguri, Naohisa Inada, Issha Kayo, Masanori Iye, Yutaka Hayano, Shin Oya, Masayuki Hattori, Yoshihiko Saito, Meguru Ito, Yosuke Minowa, Tae-Soo Pyo, Hiroshi Terada, Hideki Takami, Makoto Watanabe

(Submitted on 7 Jul 2011)

The quasar SDSS J133401.39+331534.3 at z = 2.426 is found to be a two-image gravitationally lensed quasar with the image separation of 0.833. The object is first identified as a lensed quasar candidate in the Sloan Digital Sky Survey Quasar Lens Search, and then confirmed as a lensed system from follow-up observations at the Subaru and University of Hawaii 2.2-meter telescopes. We estimate the redshift of the lensing galaxy to be 0.557 based on absorption lines in the quasar spectra as well as the color of the galaxy. In particular, we observe the system with the Subaru Telescope AO188 adaptive optics with laser guide star, in order to derive accurate astrometry, which well demonstrates the usefulness of the laser guide star adaptive optics imaging for studying strong lens systems. Our mass modeling with improved astrometry implies that a nearby bright galaxy $\sim 4"$ apart from the lensing galaxy is likely to affect the lens potential.

Submission history

From: Cristian Eduard Rusu [view email]

[v1] Thu, 7 Jul 2011 01:52:53 GMT (1035kb)

Which authors of this paper are endorsers?

Download:

- PDF
- PostScript
- Other formats

Current browse context:

astro-ph.CO

< prev | **next >**

new | recent | 1107

Change to browse by:

astro-ph

References & Citations

- INSPIRE HEP
  (refers to | cited by)
- NASA ADS

Bookmark(what is this?)