

FWHM would certainly not have allowed us to discover this very compact gravitational lens candidate.

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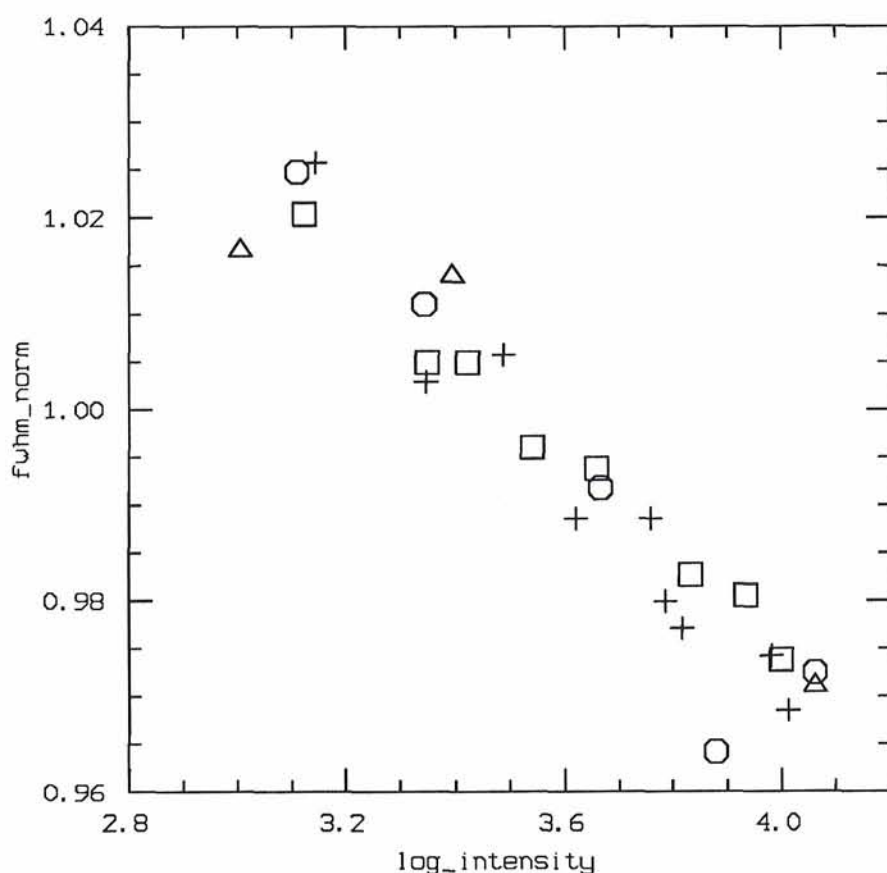


Figure 4: The FWHM is plotted as a function of the logarithm of the central intensity for images obtained with ESO CCD # 11 at the 2.2-m telescope in April 1989. The FWHM is normalized to its value at $\log(\text{intensity}) = 3.5$. Different symbols correspond to four different frames.

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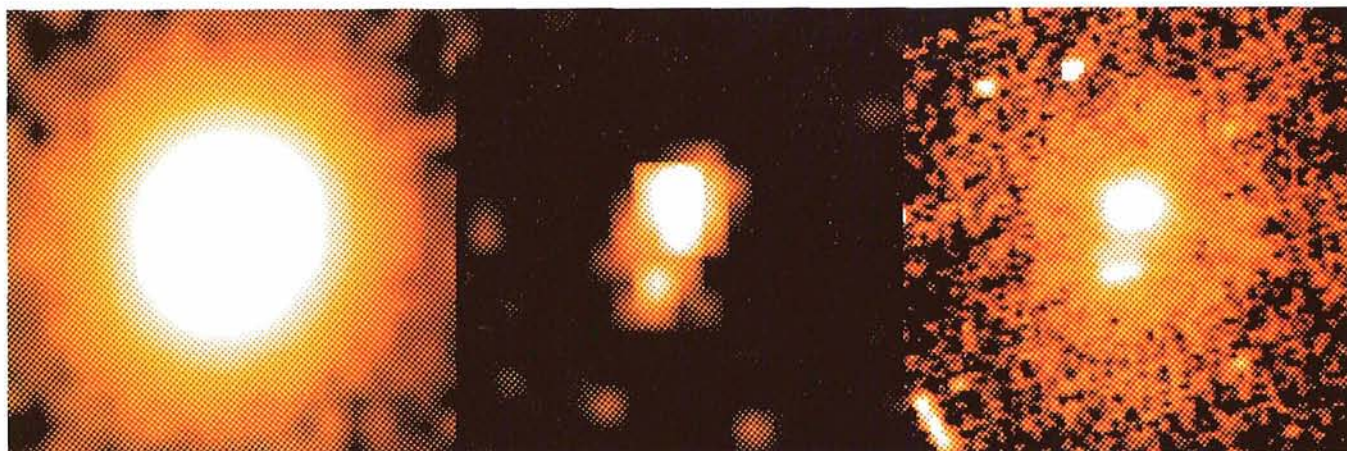


Figure 5: Images of the highly luminous quasar Q 1208+1011. Left: ground-based image, seeing = 0.9 arcsec. Middle: deconvolution of the ground-based image using the algorithm described in Magain (1989). Right: HST image. These three images are re-sampled to the same scale and normalized to the same peak intensity. The intensity scale is logarithmic.

Minor Planet Discovered at ESO is Named "Chile"

A minor planet which was first discovered on a photographic plate obtained with the ESO 1-metre Schmidt telescope in 1988 has now been named

after the country in which the La Silla observatory is located.

The observation was made on February 13, 1988 by ESO night assistant

Guido Pizarro, within the minor planet search programme by Belgian astronomer Eric W. Elst, who also found the new object on the plate. From a

number of exact positions, measured on this and other ESO plates, a preliminary orbit was computed. Interestingly, it turned out that the new minor planet had been observed before; in 1931 at the Flagstaff observatory in Arizona, USA. However, no orbit could be computed at that time and according to IAU rules, Eric Elst is therefore the official discoverer. When further observations had been secured in 1990, it was given the number (4636).

Discoverers of minor planets have the privilege to propose names for them, which are then scrutinized by an IAU Committee and authorized, if they conform with certain rules. Elst, who is a long-time visiting astronomer to ESO-La Silla, noted that no minor planet had ever been named after Chile and de-

ecided to name the new planet after this country. As is customary, he also wrote a short explanatory citation.

This is the citation for "Chile", as it appears on the Minor Planet Circulars 19697-19698 (1992 Feb. 18):

(4636) Chile = 1988 CJ5

Discovered 1988 Feb. 13 by E.W. Elst at the European Southern Observatory.

Named for the beautiful South American country in which the European Southern Observatory is located. Noted for its great wines, Chile is chiefly mountainous, with the Andes dominating the landscape. The extension of Chile across some 38 degrees of latitude embraces nearly all climates. The fascinating Chilean people are racially a mixture

of Europeans (the conquistadores from Spain, Basque families) and indigenous tribes (Atacamenos, Diaguitas, Picunches, Araucanians, Huilliches, Pehuenches and Cuncos). Today the proud Araucanian Indians form the only significant ethnic minority.

"Chile" revolves around the Sun once every 4.23 years in a slightly eccentric orbit at a mean distance of 391 million km from the Sun, i.e. between the planets Mars and Jupiter. The orbital elements have been published in Minor Planet Circular 17192. The size is not yet known with certainty, but judging from the brightness, it may be estimated that the diameter is in the 10-km range.

Congratulations to our host country and to the discoverer!
The editor

Another Chiron-type Object

R. M. West, ESO

The Discovery of 1992 AD

The announcement on January 23, 1992 (IAU Circular 5434) of a new "slow-moving" object in the solar system has been met with great enthusiasm by minor-planet and cometary astronomers alike. It was first found by Dave L. Rabinowitz at the 91-cm Spacewatch camera on January 9 and then observed with the Arizona-based telescope during the following nights. More observations were made by Eleanor Helin at Palomar and Robert McNaught at Siding Spring and when an earlier image was found on a January 1 Palomar plate, it became possible for Gary Williams of the IAU Minor Planet Bureau to compute the first, reasonably accurate orbit (IAUC 5435).

To everybody's surprise, 1992 AD – as it was now baptized – turned out to have the most extreme orbit of all known minor planets: with a semi-major axis of 20.5 AU and an orbital eccentricity of 0.58, it reaches aphelion at 32.4 AU, i.e. beyond the orbit of Neptune! The orbital period is no less than 92.5 years, and the inclination is rather high, almost 25°. 1992 AD passed through its perihelion at a heliocentric distance of 8.7 AU in late September 1991, only half a year before the discovery. This corresponds to the orbit of Saturn.

After the discovery of (2060) Chiron in 1977, 1992 AD is only the second minor planet to have been found in an orbit that is almost entirely beyond that of Saturn. Its existence strengthens the

belief held by some astronomers that there is a whole group of objects out there, waiting to be discovered with the more powerful observational techniques now becoming available.

The magnitude of 1992 AD was measured on January 9 as $V = 16.9$ and David Tholen at the NASA Infrared Telescope Facility on Mauna Kea (Hawaii) commented on the unusually red colour of the object. Preliminary values of the diameter and the albedo (ability to re-

flect the sunlight) were measured by a group of astronomers in Arizona, headed by E. Howell. Comparing infrared and visual observations, obtained simultaneously with the MMT and the 1.5-m Catalina telescopes, they found about 140 km and 0.08, respectively; the latter is not all that different from the presently accepted value for Chiron, about 0.10. Thus 1992 AD and Chiron resemble each other, at least what concerns these parameters.



Figure 1.