et's motion. The mean, visual brightness of Halley during the observing period was V = 24.4 mag and the brightness varied between approx. 23.7 and 25.0 mag. The field covered is 39×39 arcsec (84 pixels square); North is up and East is to the left.

The measured magnitude is about 0.35 mag brighter than what would be expected from Halley's nucleus alone, an avocado-shaped, 15 km long "dirty snowball", consisting of a variety of ices and dust. The brightness variations are caused by the tumbling motion of this nucleus, whereby the amount of reflected sunlight depends on the changing profile seen from the Earth.

Of particular interest is the fact that the extended coma (i.e. the dust cloud around the nucleus), which was observed with the same telescope in 1989 at heliocentric distance 10.1 AU (see the *Messenger* **56**, p. 45; June 1989), has now completely disappeared. In fact, no coma is visible at the 29 mag/sq.arcsec surface brightness level, corresponding to 1500 times less than the sky background emission.

It is therefore fairly certain that the release of dust from the nucleus must have ceased somewhere between 10.1 and 12.5 AU heliocentric distance. The former coma has now dispersed into the surrounding space and it is no longer being replenished by dust from the nucleus. In other words, Halley seems to have entered a long period of hibernation which is likely to last until about early 2061 when it again comes within about 5 AU from the Sun and will again be awakened by the sunlight.

Still, an accurate evaluation of the seemingly point-like image seen on this



picture indicates that it is somewhat elongated in the direction opposite to the Sun. Together with the extra light observed, this could mean that a very low level of activity is still present and that there may still be some dust in the immediate neighbourhood of the nucleus. This will most probably not be the last image of Halley obtained during the present passage. Modern, large reflectors are able to image objects of 27th magnitude or even fainter, so it should be possible to follow this famous comet some years more.

R.M. WEST, ESO

Minor Planet Named After Lo Woltjer

In the most recent issue of the Minor Planet Circulars, published by the Minor Planet Bureau of the IAU, the following naming of a minor planet is found on page 16591:

"(3377) Lodewijk = 4122 P-L

Discovered 1960 Sept. 24 by C.J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels.

Named in honor of Lodewijk Woltjer, former editor of the *Astronomical Journal* and former director of the European Southern Observatory, well known for his studies on the Crab nebula. Name proposed by J.H. Oort."



We congratulate Lo Woltjer to this extremely well-deserved honour and show here a picture of his minor planet, obtained on 17 April 1988 with the ESO Schmidt telescope. Because of its motion, it is seen as a short trail on this blue 60-min exposure. On this date, "Lodewijk" was near opposition at a geocentric distance of 308 million kilometres. The Editor