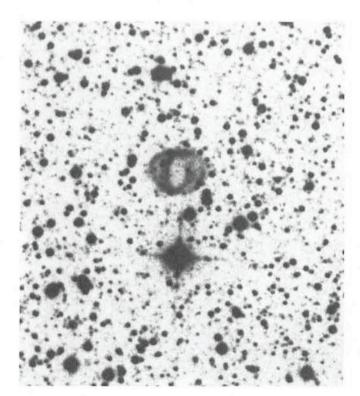
ESO Photographer Finds New Celestial Object

The production of copies for the ESO/SRC Atlas of the Southern Sky is proceeding at the ESO Sky Atlas Laboratory in Garching. For this atlas 606 blue sensitive plates have been exposed at the UK Schmidt telescopes in Coonabarabran, Australia, and corresponding red sensitive plates are being made with the ESO Schmidt telescope at La Silla, Chile.

The atlas is similar to the Palomar Atlas, which was produced in the 1950s, but it utilizes new materials, resulting in the limiting magnitude being approximately 2 magnitudes fainter than that of the Palomar Sky Survey.

One of the major virtues of the ESO/SRC Atlas of the Southern Sky is that great attention is being paid to the fidelity of the film and glass copies. Much time goes into checking the final product. When it is sent to the more than 200 customers all over the world, it has as few defects as is humanly possible. The photographers at the ESO Sky Atlas Laboratory who are involved in the production of this Atlas spend a substantial part of their time checking the original plates and the copies under microscope.

During this quality control, an ESO photographer, Herbert Zodet, noted a faint patch on a film copy of the field 135 on an ESO red plate. He noticed that there was no corresponding object on the blue plate and suspected a plate fault. However, after further checking it appeared that the object might be real, and he informed one of the ESO astronomers about his discovery. And indeed, there is now little doubt that Mr. Zodet found a hitherto unknown planetary nebula in the Milky Way.



Enhanced image of "Zodet's planetary". Diameter 20".

As can be seen on the picture, it has a double ring structure and, as is sometimes the case in such objects, no central exciting star can be seen neither on the blue nor on the red survey plate. The object, which is located at 15 h 05 m -61° , 5, has now been given the designation ESO 135 -PN4. Andris

Lauberts has measured the object and assigns B magnitude 17.5 and B-R=4.2.

Despite its very official name, the object is now better known as "Zodet's planetary" by the staff at ESO Garching.

R. M. West

Nova Sagittarii 1984

On September 26, 1984, W. Liller discovered a possible nova in Sagittarius; the apparent V magnitude was 11.0 (IAU Circ. No. 3995). A prediscovery image was found at magnitude pgm = 13.1 on a plate taken on September 22 at the Maria Mitchell Observatory (IAU Circ. No. 3997). On the evening of October 4, we were observing at La Silla, with the 2.2 m telescope, the Boller and Chivens spectrograph with a grating giving a resolution of 3 Å in the spectral range λλ 6100-7100 Å, and with an RCA CCD detector. The sky was partly cloudy and the seeing rather poor. We took a 10-min exposure of Liller's object. The spectrum shows an extremely strong and broad (FWHM \sim 2,200 km s⁻¹; total width > 3,100 km s⁻¹) H α emission line as shown on Fig. 1 (the vertical line indicates the rest wavelength of Hα), confirming that this is indeed a nova (IAU Circ. No. 3998). M.-P. Véron-Cetty and P. Véron

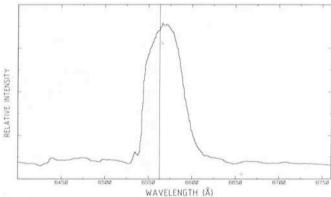


Fig. 1.

List of Preprints Published at ESO Scientific Group

September - November 1984

- P. Véron and M.-P. Véron-Cetty: Star Formation in Early-Type Galaxies. Astronomy and Astrophysics. September 1984.
- P. Véron, M.-P. Véron-Cetty and M. Tarenghi: The Ultraviolet Absorption Spectrum of NGC 4151. Astronomy and Astrophysics. September 1984.
- G. Contopoulos: Nonlinear Problems in Stellar Dynamics. Proceedings of "ELAF 84". September 1984.
- R. H. Miller: Flyby: Numerical Experiments on a Galaxy Orbiting Within a Galaxy Cluster. Astronomy and Astrophysics. September 1984.
- 344. P. A. Shaver and J. G. Robertson: The Close QSO Pair Q 1548 + 114A, B. Monthly Notices of the Royal Astronomical Society. October 1984.
- 345. M. Azzopardi, J. Lequeux and B. E. Westerlund: New Carbon Stars in Spheroidal Galaxies: I. Sculptor, Carina, Leo I and Leo II Systems. Astronomy and Astrophysics. October 1984.
- R. E. de Souza, G. Vettolani and G. Chincarini: The Flattening Distribution of Lenticular Galaxies. Astronomy and Astrophysics. October 1984.