

many and the Netherlands met at Leiden to prepare a possible merging of some of the principal astronomical journals that appeared in Europe [20]. The meeting had been convened by S.R. Pottasch of the Kapteyn Laboratory who, together with A. Reiz of Copenhagen Observatory and J.-L. Steinberg of Meudon Observatory had been the first to explore attitudes with regard to a possible merger; Pottasch and Steinberg were closely connected with editorial work for a journal in their countries. The idea found general support and nine months later, per January 1, 1969, the first issue of the new journal appeared. The merging journals were: *Annales d'Astrophysique* (founded in 1938), *Bulletin Astronomique* (1884), *Journal des Observateurs* (1915), *Zeitschrift für Astrophysik* (1930), and *Bulletin of the Astronomical Institutes of the Netherlands* (1921), to which was added later the Scandinavian *Arkiv för Astronomi* (1948). First editors of the new journal were S.R. Pottasch and J.-L. Steinberg. The related series *A & A Supplements* appeared one year later, per January 1, 1970 under the editorship of L.L.E. Braes of Leiden, who was succeeded in 1971 by B. Hauck of Lausanne. The *Monthly Notices of the Royal Astronomical Society* refrained from merging, by decision of the Council of the Society on October 13, 1967 [21].

How did ESO come in? The April 1968 meeting had resolved that the affairs of the Journal should be supervised by a Board of Directors consisting of astronomers and representatives of sponsoring national organizations. This Board should be the autonomous owner of the Journal, including the title, with a private publisher acting as agent for the Board. However, in order to enter into a contract with the publishing agent as well as for other reasons, a legal status for the Board would have been required, the accomplishment of which for an international organization would have

been a time-consuming and somewhat complicated affair. An alternative solution was therefore preferred: making use of the legal status of ESO, whose aims as a joint European astronomical programme ran parallel to those of the Journal. The matter met support by the ESO Council in July 1968, so that steps could be taken to prepare the necessary legal documents. These found final approval and confirmation at the December 1968 Council Meeting [22]. They were:

- a statement concerning the creation of the Journal and the relation of its board of Directors to ESO;
 - a formal agreement between ESO and the Board of Directors;
 - the contract between ESO and the publisher, Springer Verlag;
- and accordingly Council authorized the Director General of ESO to sign the contract just mentioned.

The basic idea was, that ESO would make its administrative and legal services available to the Board of the Journal but would carry no financial obligation or responsibility. Apart from making use of ESO's services, the Board would have an entirely independent status excluding influence from ESO side on its scientific policy. As a trait-d'union between ESO and the Board, the author, at that time Scientific Director of ESO, became a member of the Board of Directors – and was, in fact, chosen as its Chairman.

Henceforth, European astronomers would turn to the new Journal for the publication of their work – including that based on observations at La Silla.

References and Notes

Abbreviations used:

EHA = ESO Historical Archives (see *The Messenger* of December 1988).

FHA = Files Head of Administration at ESO Headquarters.

EHPA = ESO Historical Photographs Archives.

- [1] FHA Doc. ScAct-1.
- [2] FHA Doc. ScAct-2.
- [3] FHA Coc. ScAct-3.
- [4] For a short biography of B. Strömrgren see, for instance, the obituary by M. Rudkjöbing in *Quarterly Journal R.A.S.* Vol. 29, p. 282, 1988.
- [5] See the report by Blaauw in *ESO Bulletin* No. 4 of July 1968.
- [6] See Minutes Cou Meeting, June 1970, p. 41.
- [7] See FHA Docs ScAct-4 and 5.
- [8] FHA Doc. ScAct-6.
- [9] See FHA Doc. ScAct-3 of June 1967.
- [10] Minutes 7th Cou Meeting, p. 29ff.
- [11] Strömrgren's letter of Nov. 15 with accompanying Cou Letter 00/2426/68 of Ramberg, and Strömrgren's letter of Nov. 20 with accompanying Cou Letter 00/2464/68 by Manager Bloemkolk, both in FHA Cou and FC Doc's 1.1.1./1.2.1., Circular Letters.
- [12] Letter marked 3137/69 in file FHA 1.1.1/1.2.1.
- [13] FHA Doc. Cou-2, 2283/69.
- [14] In FHA, attached to the Report of the Working Group referred to under reference [14].; an English translation was made at the request of Funke according to FHA 1.11/1.21, Cou-2 2321/69.
- [15] FHA Doc. Cou-2 3304/69.
- [16] We note that in the W. Group's report the GPO is not considered as one of the three middle-size telescopes of the Convention, contrary to the decision taken by the ESO Committee in July 1960 as reported in article IV.
- [17] See, for instance, FHA Doc. Cou-2 3309/69.
- [18] EHA-I.C.7.; not yet subclassified in December 1989.
- [19] In *Europhysics News, Bull. of the Eur. Phys. Soc.*, Vol. 6, No. 12, Dec. 1975, p. 3–5.
- [20] A report on this meeting by S.R. Pottasch is in the section Earliest Developments of the Archives.
- [21] The Archives contain the relevant correspondence of D.H. Sadler and F. Graham Smith with J.H. Oort and S.R. Pottasch of October 1967, and the report of the R.A.S. Working Group for study of the matter.
- [22] See minutes of this meeting and Doc. FHA Cou-2 CL 2399 of Nov. 14, 1968.

SN 1990I in the Polar Ring Galaxy NGC 4650 A

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1. A Brief History

On the night of April 29/30, 1990, Oscar Pizarro, night observer assistant at the ESO Schmidt telescope found on an ESO Schmidt B plate taken on 27.1 April 1990, a new, rather luminous object, situated very close to the edge of a quite bright galaxy. The discovery was made by comparing the new plate with

an old one taken about 10 years ago. From a first glance at the plate, it was clear that the object was likely to be a new supernova.

The host galaxy turned out to be NGC 4650 A ($\alpha = 12^{\text{h}} 42^{\text{m}} 05^{\text{s}}$, $\delta = -40^{\circ} 26' 30''$, 1950 Equinox) with the object located 14 arcsec east and 47 arcsec south of the galaxy nucleus. Before the

end of the same night we managed to obtain 2 CCD frames (B and V filters) at the ESO-MPI 2.2-m telescope. Although the observations were performed at a very high airmass (~ 2), we succeeded in obtaining quite accurate photometry; the mean values were (29.4 April 1990) $V = 15.6$ and $B = 16.7$. Due to the location of the object and to its brightness

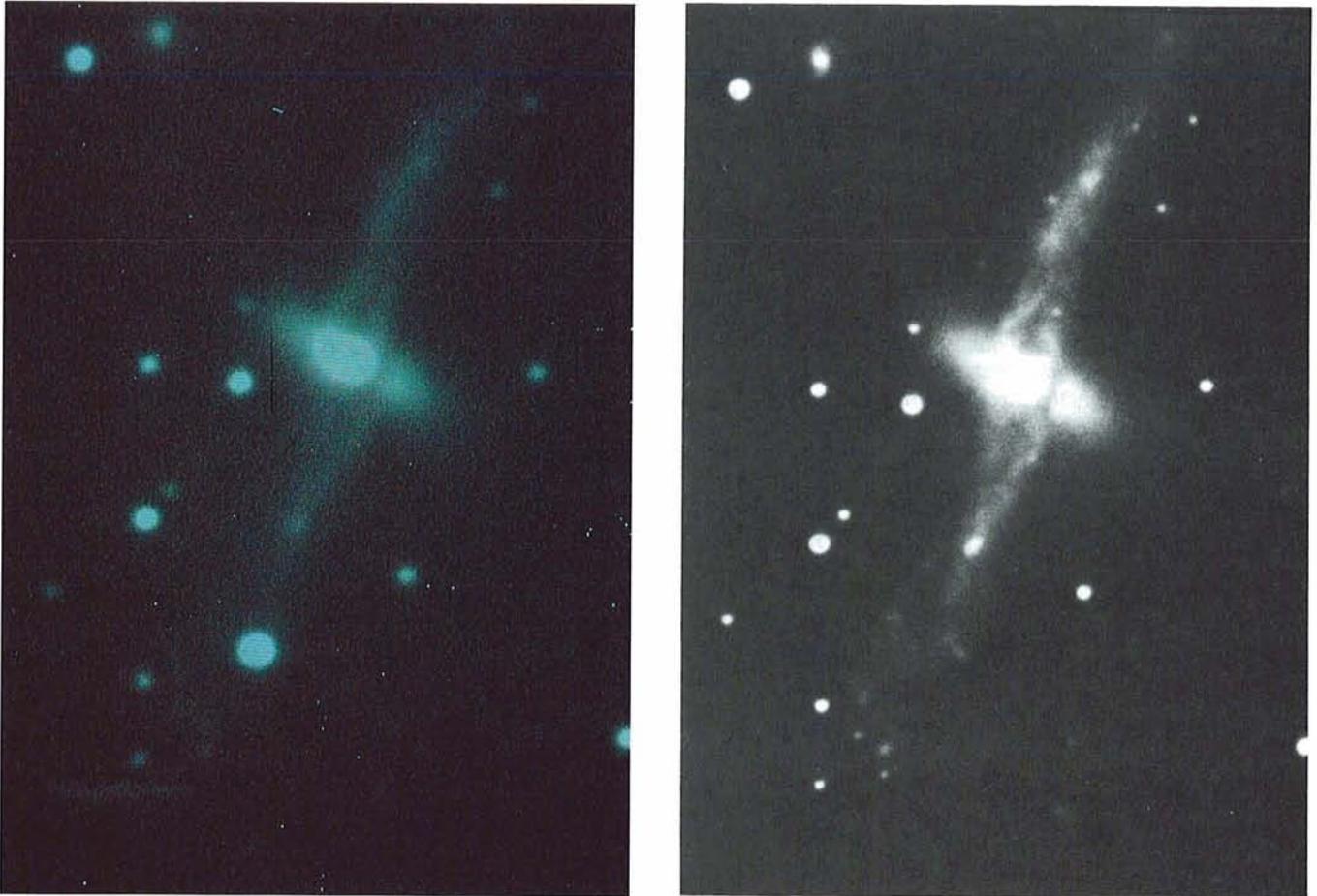


Figure 1: The left picture shows a 2.2-m CCD exposure of SN 1990I in NGC 4650A in the V band. The SN is the bright object, close to the southern end of the polar ring. It is absent on the picture to the right which has been reproduced from a 90-minute exposure, obtained in 1977 with the ESO 3.6-m telescope on IIIa-J emulsion. North is up and east is to the left.

(see Fig. 1) we were confident that we were dealing with a new supernova (Pizarro et al., 1990).

In order to learn the type of this SN, a 30-min. spectrum was obtained the following night (April 30.1) at the ESO 1.52-m telescope equipped with the Boller and Chivens spectrograph attached. The spectrum, flat field corrected and sky subtracted, is shown in Figure 2. By comparing the prominent features between 5400 and 6800 Å with published SN spectra (e.g. Branch et al. 1983) and considering the observed colour index and the absolute magnitude of the SN (Heliocentric velocity of NGC 4650 A = 2904 km sec⁻¹, Whitmore et al., 1987), it appears that SN 1990 I is a supernova of type Ia, ~40 days after the maximum (Pasquini, Jarvis and Leibundgut, 1990).

A careful analysis of published data on type Ib supernovae (Harkness et al., 1987), however, shows that spectra and colours of a Ib supernova ~20 days after maximum can be almost identical to those of a SN Ia which is only few weeks older; we cannot then exclude that SN 1990 I is a Ib SN 2–3 weeks

after maximum. For the time being it is not possible to distinguish between these two possibilities by means of optical observations, but the differences between type Ia's and Ib's should be clear ~200 days after maximum. In fact, at that stage, while Ia spectra are dominated by FeII and FeIII lines (Meyerott,

1980, Danziger et al., 1990), Ib supernovae show prominent OI lines (Gaskell et al., 1986).

2. SN 1990I and the Host Galaxy

NGC 4650A is probably one of the best studied polar ring galaxies (Laust-

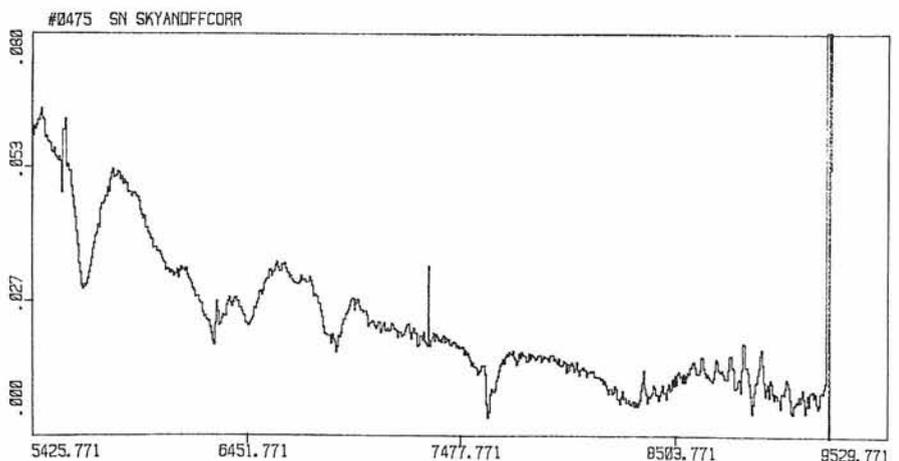


Figure 2: 30-minute Boller and Chivens spectrum of SN 1990I taken at the ESO 1.5-m telescope. The spectrum, wavelength calibrated, is corrected for flat field and sky subtracted.

sen and West, 1980, Whitmore et al., 1987); in Figure 1 the ring is visible as a disk-like feature almost oriented north-south and SN 1990I is located close to its southern edge. Although it cannot be excluded that the alignment of the SN 1990I with the polar ring is a projection effect, it is more probable that the SN was really formed in the ring.

The possibility that SN 1990I is of type Ia and is associated with the ring, makes this object particularly interesting, because the ring has quite blue colours, is knotty and very rich in HII regions indicating significant recent star formation (Laustsen and West, 1980); on the other hand, SN type Ia are typical of galaxies in which no young stellar population is present and it is generally agreed that Ia supernovae are associated with a low mass, old population (Woosley et al., 1986).

The location of SN 1990I would not be unusual if, instead, we were dealing with a type Ib, which are thought to

have massive progenitors. Since the number of spectroscopically and photometrically well-sampled supernovae Ib is rather small, the follow-up of SN 1990I is very interesting, even if it should turn out not to be of type Ia.

The favourable location of SN 1990I in the sky will allow La Silla observers to follow it during the next 5 months or so.

Acknowledgements

Special thanks and congratulations go to O. Pizarro, who discovered SN 1990I in his long-term survey of Schmidt plates. I also appreciate the help of M. Bahamondes, J. Miranda and J. Borquez in obtaining some of the early observations, as well as several visiting astronomers, who kindly spent part of their time observing SN 1990I: V. Burwitz, D. Pollacco and J.P. Sivan. Finally, I am grateful to B. Leibundgut and E. Oliva for helpful discussions.

Latest News

According to M.M. Phillips, CTIO, spectra of SN 1990I show that it is of type Ib (IAUC 5032; June 14, 1990).

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The Stellar Content of the Dwarf Galaxy NGC 3109

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1. Introduction

Despite their modest appearance, dwarf irregular galaxies (DIGs) form an interesting class of objects in many re-

spects. First, the high mass-to-light ratios measured for the smallest systems make DIGs some of the best candidates for the study of the dark matter

content of the universe. Observations suggest that the ratio of hidden-to-luminous matter increases when going from irregular systems such as Sextans

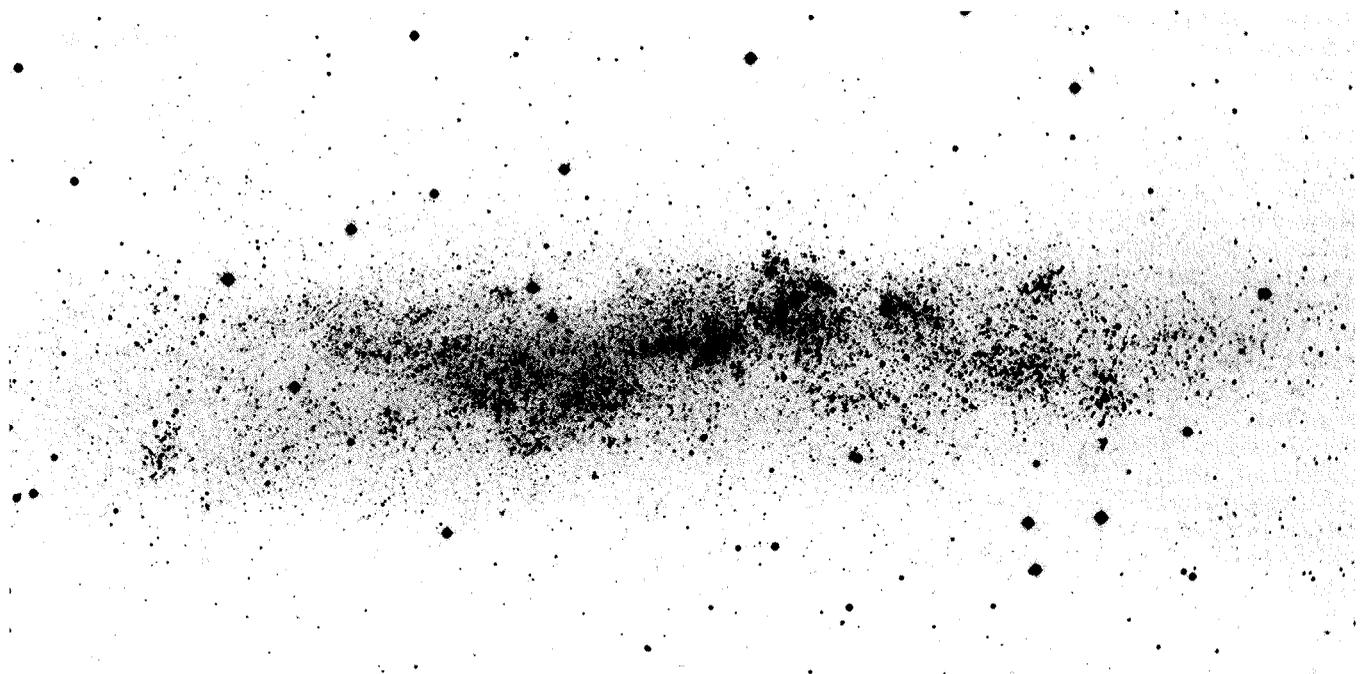


Figure 1: The SBm galaxy NGC 3109 from an ESO 3.6-m 60-min exposure on Kodak IIIa-J + GG 385.