Figure 1: IRAS 04505–2958 is an infrared ultraluminous source which is also an optical QSO (i.e. by the criteria of Véron-Cetty and Véron in their catalogue). The figure shows two bright components separated by 1.6 arcsec, northernmost of which is known to be a foreground G star. Note the ring-like feature 1.5 arcsec south-east of the nucleus and a second clear "blob" 1 arcsec east of the nucleus with four or more other distinct but less luminous blobs beside it.

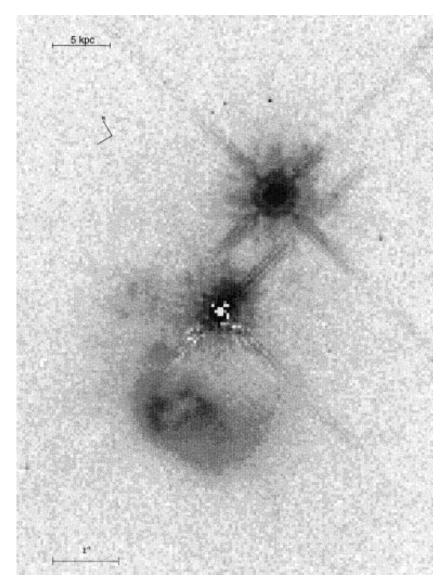
We interpret the image as a violent interaction between two galaxies, one of which at least was a spiral. The ring may be the ring galaxy left behind when one galaxy plunges vertically through the plane of a spiral. The prominent blob could be the displaced nucleus of the ring galaxy, the lesser blobs sites of star formation. The projected distance between the QSO and the centre of the ring is p 5 kpc ( $H_0$ = 75) so that if the interacting galaxies collided at no more than 500 km/s, the one passed through the plane of the other less than  $10^8$  years ago.

Courtesy Peter Boyce, Department of Physics and Astronomy, University of Wales, Cardiff, UK.

galaxies of a wide variety of types and luminosities.

The relationship between active galaxies, ultra-luminous IRAS galaxies, quasars, and quasar hosts occupied many speakers, and much of the talk during the coffee breaks. Although there was no definitive scenario blessed by the participants, there were clear lines for further research to be followed up. Evidently, it was the connection between the new observational potentials and the possibility to further our understanding of the origin and evolution of nuclear activity that made this meeting so timely.

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## **ESO Libraries: Enhanced Services on the WWW**

## U. GROTHKOPF, ESO

These are exciting times for librarians. Never before have library services changed so quickly as they do now, and never before have library users requested access to such a variety of information resources within a minimum of time. Even more, our users want the important resources to be presented in an easily understandable way without having to read extended manuals, and, of course, they want them to be accessible from their desktops.

The World Wide Web (WWW) plays a major role in this scenario. It provides easy access to a large number of useful databases and other electronic resources (but note that the most comprehensive bibliography in astronomy and astrophysics still is only available on paper!) For libraries, the Web represents both a great challenge and a wonderful opportunity: We librarians need to know where to find the requested information, how to cope with the variety of access procedures currently used, and how to make sure electronic publications will be retrievable after many years despite their seemingly ephemeral nature. But we also have an extremely flexible tool at hand that allows us to present our services in an organised, clearly laid out way. The homepage has become the business card of a library.

When we designed the ESO Libraries homepage (http://www.eso.org/libraries/eso-libraries.html, Fig. 1) in early 1995, we had two kinds of users in

mind: those who wish to find their own way to information resources should find links to the most important internal resources as well as external sites; those who prefer to just send their enquiries and requests to us must be able to do so from everywhere and at any time. The main options on our homepage were changed very little since then, but ease of access to some of the services has been improved. The following is a brief description of new or recently enhanced ESO Libraries services on the Web. Most of them can be reached from the Libraries Catalog and Databases page at URL http://www.eso.org/libraries/ esocat.html. Should you wish to obtain more detailed information or have





Welcome to the ESO Libraries Homepage. Please choose from the following options:

- About the ESO Libraries
- ESO Libraries Catalog and Databases
- Other Astronomy Libraries and Resources
- Libraries in General
- Abstract Services
- Preprint Services
- Electronic Journals
- Document Delivery Services
- Publishers and Book Shops
- General Information
- More Goodies (including LISA-II conference)
- Helpdesk



Back to ESO Homepage

[ ESO | Library Catalog | Libraries Helpdesk | Search ]

Send comments on this document to Usa Grothkopf <esolib@eso.org> Last update: Oct 29, 1996

Figure 1: The ESO Libraries World Wide Web homepage.

questions regarding these and other services, please contact the librarians (esolib@eso.org).

#### 1. World Wide Web Version of the Library Catalog

### 1.1 WebCat

The ESO Libraries catalog has been available on the Internet for three years and can be accessed by telnet. Since October 1996, ESO is among the first organisations to offer the library catalog through a World Wide Web interface. The WebCat is available at URL http://www.eso.org/libraries/ webcat.html. It can also be reached via the libraries' homepage ESO Libraries Catalog and Databases / ESO Libraries Catalog and finally on the Web-Cat icon. In addition, it is directly accessible by clicking on the Library Catalog option on the top or bottom index bar on any ESO Libraries Web page.

# 1.2 IAU Thesaurus Terms Added to Catalog Records

The IAU Thesaurus was compiled for the International Astronomical Union, Commission 5 (Documentation) by R.M. and R.R. Shobbrook [1]. Its primary aim is to standardise the terminology used in astronomy by means of controlled vocabulary.

During the past summer, IAU Thesaurus terms were added to catalog records for astronomy books. All records to which the same thesaurus term was assigned can be found easily by clicking on the hypertext link in the WebCat. For an even more complete search, cross references from the initial search term will find catalog records that contain related, broader or narrower thesaurus terms.

# 2. Preprints Received in the ESO Library Garching

The library in Garching receives an average of 200 preprints per month from other astronomical institutes world-wide. Authors' names, titles, and issuing institutes are included in the preprints database which has been WAIS-indexed, so that search results will be displayed according to their relevance. Based on retrieved preprints, users can now complete their search by choosing from various options: links to the ADS Abstract Service and to the STEPsheet database

Figure 2: Publications of the ESO users community. The Web interface provides links to the ADS Abstract Service, the ESO preprint database and the SISSA electronic preprint

## Publications of the ESO User's Community

Published mainly in refereed journals and conference proceedings.

Define new query Home

| Authors   | Title   | Reference  | Related<br>Papers | Related<br>Preprints |
|---|---|--|-------------------|----------------------|
| Giacconi R.   | ESO 1993 to 2000<br>plus.   | Messenger, 82, 1–5<br>(1995)   | ADS               | SISSA                |
| Rosati P., Della<br>Ceca R., Burg<br>R., Norman C.,<br>Giacconi R.                          | A first determination of the surface density of galaxy clusters at very low X-ray fluxes.         | ApJ, 445, L11–L14<br>(1995)  | ADS               | ESO                  |
| McLean, B.J.,<br>Böhringer, H.,<br>Burg, R.,<br>Giacconi, R.,<br>Huchra, J.P.,<br>Voges, W. | Optical<br>identification of<br>ROSAT all–sky<br>survey galaxy<br>cluster candidates.             | In: Astronomy from<br>Wide-Field Imaging,<br>eds. H.T. MacGillivray,<br>E.B. Thomson, B.M.<br>Lasker, I.N. Reid, D.F.<br>Malin, R.M. West, and<br>H. Lorenz (Dordrecht,<br>Khuwer), p. 653–657<br>(1994) | ADS               | ESO                  |
| Burg, R.,<br>Giacconi, R.,<br>Forman, W.,<br>Jones, C.                                      | The X-ray<br>luminosity<br>functions of Abell<br>clusters from the<br>Einstein cluster<br>survey. | ApJ, 422, 37–45 (1994)   | ADS               | ESO                  |

(the preprints database of the STScl Library to which bibliographic details are added upon publication of a preprint) allow them to check whether a paper has been published in the meantime. The ESO preprints database can be queried again in order to find other preprints of interest. Finally, the SISSA electronic preprint server in Trieste, Italy, a mirror site of the Los Alamos National Laboratory's e-print archive, can be accessed and searched for related preprints.

# 3. Publications of the ESO User's Community

The bibliography of publications of the ESO user's community contains papers by ESO staff members and visiting astronomers if they refer to data obtained with ESO telescopes. A query form supports searches for authors, titles, and publication years. Hyperlinks are pro-

vided to the ADS Abstract Service from where the abstract of the paper as well as related publications may be retrieved, to the ESO Libraries' preprint database in order to find titles of currently unpublished papers, and to the SISSA electronic preprint server (Fig. 2). Astronomers might find these new features especially useful when preparing observing proposals.

#### 4. Access to Electronic Journals

As publishers are moving more and more towards electronic publishing, some of the astronomical journals will be made available in electronic form, be it exclusively or in addition to the paper version. The ESO Libraries provide access to on-line versions from the Electronic Journals WWW page at URL http://www.eso.org/libraries/electronic.html. In addition, electronic addresses of journals are included in the library catalog.

From early next year onwards, URLs will not only be displayed in the WebCat, but will be active links to the corresponding site. Double clicking on the underlined address will then take users directly into the electronic journal.

### Acknowledgements

Our sincere thanks go to ESO's Webmaster Michael Naumann who worked tirelessly on these enhancements in especially stressful times.

#### References

[1] Shobbrook, R.M. and R.R. Shobbrook: The Astronomy Thesaurus. Version 1.1. Comp. for the International Astronomical Union, Commission 5. Epping: Anglo-Australian Observatory, 1993.

Uta Grothkopf e-mail: ugrothko@eso.org

## ANNOUNCEMENTS

#### IN MEMORIAM

## **Gerhard Bachmann**

24.5.1931 - 9.12.1996

With deep regret we have to inform the ESO Community of the passing of Mr. Bachmann.

Mr. Bachmann served as Head of Administration of ESO from December 1972 until May 1996.

He contributed greatly to the creation and development of an administrative and political framework for European research in Astronomy, in particular in the ESO member states.

We are deeply grateful for his work.

Dr. Peter Creola President of the Council Prof. Riccardo Giacconi Director General

## Prof. Riccardo Giacconi

## **New ESO Preprints**

#### September–November 1996

### **Scientific Preprints**

- 1185. P.A. Mazzali et al.: The properties of the peculiar type Ia SN 1991bg. II. The amount of <sup>56</sup>Ni and the total ejecta mass determined from spectrum synthesis and energetics considerations. M.N.R.A.S.
- 1186. R.E.S. Clegg, P.J. Storey, J.R. Walsh, L. Neale: Measurement of the <sup>12</sup>C/<sup>13</sup>C ratio in Planetary Nebulae. M.N.R.A.S.
- 1187. L. Achmad, H.J.G.L.M. Lamers, L. Pasquini: Radiation driven wind models for A, F and G supergiants. AA.
- 1188. P. Martin and J. Belley: Nebular gas abundances and mixing processes in the ringed galaxy NGC 4736. AA.
- 1189. M. Villar-Martín and L. Binette: Ca depletion and the presence of dust in large scale nebulosities in radio galaxies (II). AA.
- 1190. S.G. Djorgovski et al.: Dynamical correlations for globular clusters in M31. *ApJ*.

- 1191. D. Minniti et al.: An unusual brightening of the eclipsing binary star AKO 9 in the globular cluster 47 Tucanae observed with HST. ApJ. Letters.
- 1192. J.Th. van Loon et al.: Mass losing AGB stars in the LMC. To appear in Proc. Of IAU Symp. 177: The Carbon Star Phenomenon, 27–31 May 1966, Antalya (Turkey), ed. R.F. Wing, Kluwer AP
- 1193. L. Masperi and S. Savaglio: Comparison of stars and decaying neutrinos as additional sources of intergalactic UV background. AA.
- 1194. G. Mathys et al.: The mean magnetic field modulus of Ap stars. AA.
- 1195. P. Fouqué and W.P. Gieren: An improved calibration of Cepheid visual and infrared brightness relations from accurate angular diameter measurements of cool giants and supergiants. AA.
- 1196. Ğ. Meylan and D.C. Heggie: Internal dynamics of globular clusters. AA Review
- 1197. S. Cristiani et al.: The clustering properties of the Lyman- $\alpha$  clouds. M.N.R.A.S.

#### **Scientific Preprints**

- 71. P. Dierickx et al.: The VLT primary mirrors: mirror production and measured performance.
- 72. The Early Universe with the VLT. Contributions on VLT instrumentation. To be published in the Proceedings of the ESO Workshop "The Early Universe with the VLT", ed. J. Bergeron, Springer Verlag, in press.

## **Personnel Movements**

### **International Staff**

(1 October - 31 December 1996)

#### **ARRIVALS**

### EUROPE

BONNEAU, Jean-Michel (F), Finance Controller DEVILLARD, Nicolas (F), Astronomical Data Reduction Specialist