

## REGIONAL GEOLOGY OF PARANAL HILL

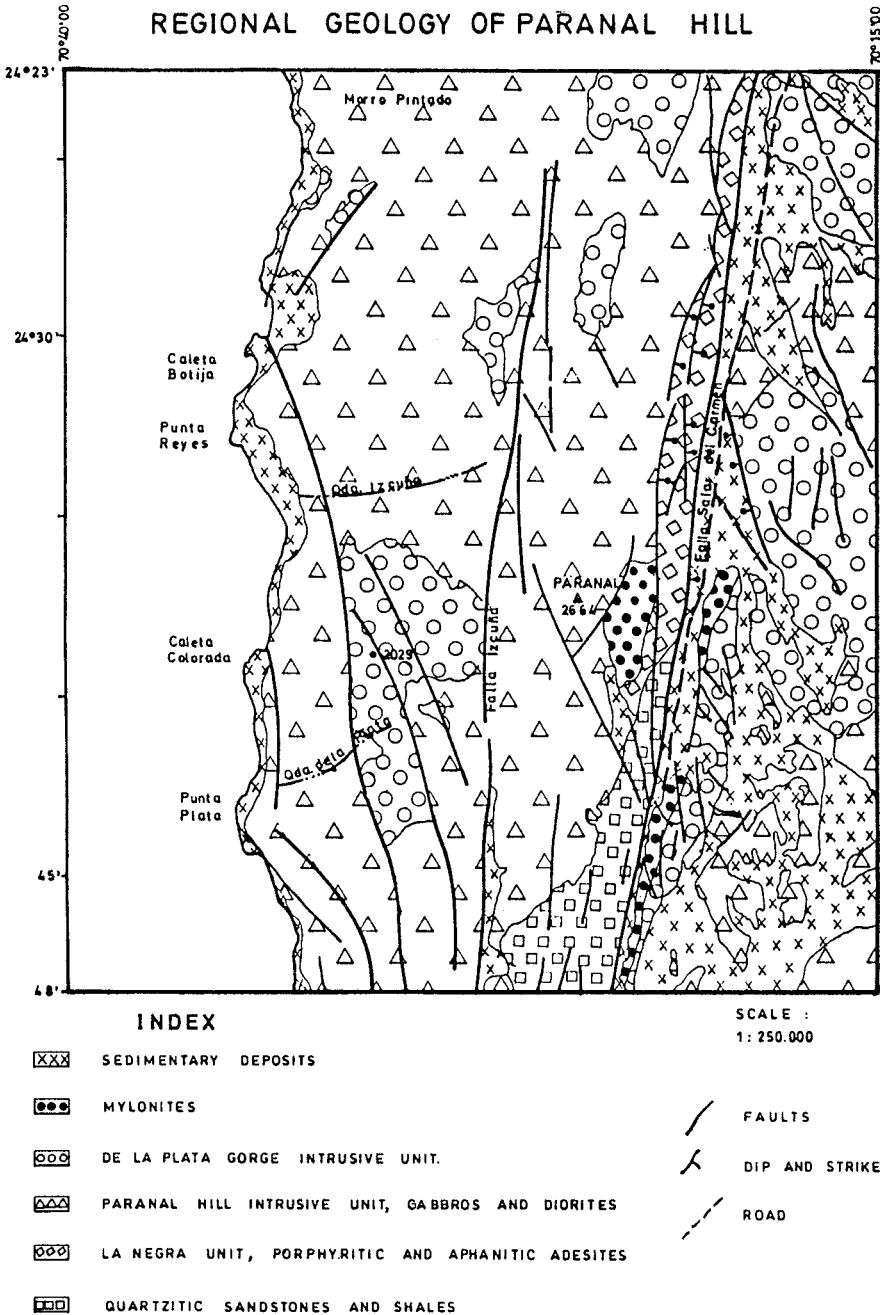


Figure 8: Regional Geology of Paranal Hill. (F. Ferraris, 1978).

Bellair P. and Pomerol C., 1984, *Eléments de Géologie*, A. Collins ed., Paris.  
*La Recherche* 228, January 1991, "Le volcanisme andin" Magazine, Paris.  
 Piddo J., 1990, "Geotechnic-Geological Study of Vizcachas and Paranal hills" ESO report.  
 Figure 3: As found in Bellair P. and Pomerol C., 1984, *Eléments de Géologie*, page 108.  
 Figure 4: As found in Bellair P. and Pomerol C., 1984, *Eléments de Géologie*, page 132.  
 Figure 5: As found in Bellair P. and Pomerol C., 1984, *Eléments de Géologie*, page 110.  
 Figure 7: As found in Dercourt and Paquet 1985, *Géologie, Objets et Méthodes*, page 50, chpt. 4.  
 Figure 8: As found in Piddo J., 1990 "Geotechnic-Geological Study of Vizcachas and Paranal hills" ESO report, Annex, plate 2.

## New ESO Preprints

(December 1991 – February 1992)

### Scientific Preprints

803. E. Giraud: The Environment of 3C 255. *Astronomy and Astrophysics Letters*.  
 804. E. Giraud: Morphology of Faint Blue Galaxies. *Astronomy and Astrophysics Research Note*.  
 805. F.R. Ferraro, F. Fusi Pecci and R. Buonanno: The Galactic Globular Cluster NGC 5897 and its Blue Stragglers Population. *Monthly Notices of the Royal Astronomical Society*.  
 806. F.R. Ferraro et al.: On the Giant, Horizontal, and Asymptotic Branches of Galactic Globular Clusters. IV: CCD-Photometry of NGC 1904. *Monthly*

*Notices of the Royal Astronomical Society*.

807. P.A. Mazzali, L.B. Lucy and K. Butler: Barium and Other S-Process Elements in the Early Time Spectrum of SN 1987A. *Astronomy and Astrophysics*.  
 808. P. Padovani: A Statistical Analysis of Complete Samples of BL Lacertae Objects. *Astronomy and Astrophysics*.  
 809. P. Ruiz-Lapuente, L.B. Lucy and I.J. Danziger: The Use of Nebular Spectra of Type Ia Supernovae for Distance Determinations. The Distance to the Centaurus Group.  
 P. Ruiz-Lapuente et al.: Spectroscopic Differences Among Type Ia SNe and their Use as Standard Candles.  
 810. D. Baade: Nonradial Pulsations of O- and B-Stars. Invited Review presented at the Kiel-CCP7 workshop on "Atmospheres of early type stars" and to appear in the proceedings edited by U. Heber and C.S. Jeffery (Springer, *Lecture Notes in Physics*).  
 811. P. Ruiz-Lapuente et al.: Modeling the Iron-Dominated Spectra of the Type Ia SN 1991T at Premaximum. *The Astrophysical Journal (Letters)*.  
 812. J. Surdej et al.: Optical Observations of Gravitational Lenses. Invited paper at the "Hamburg International Conference on Gravitational Lenses", (Hamburg, Sept. 9–13, 1991). To appear in the Conference Proceedings, Springer, *Lecture Notes in Physics* series.  
 813. P. Magain et al.: Q 1208+1011: The Most Distant Multiply Imaged Quasar, or a Binary? *Astronomy and Astrophysics Letters*.  
 814. Bo Reipurth and S. Heathcote: Multiple Bow Shocks in the HH34 System. *Astronomy and Astrophysics*.  
 815. L. Pasquini et al.: Detection of Strong Chromospheric and Coronal Activity in Pop II Binaries.  
 L. Pasquini and E. Brocato: Chromospheric Activity and Stellar Evolution: Clues from IUE Data.  
 R. Pallavicini et al.: A Low-Resolution Spectroscopic Survey of Post-T Tauri Candidates.  
 G. Tagliaferri et al.: Optical Spectroscopy of Cool Stars Detected by Exosat.  
 G. Cutispoto et al.: Photometry of Serendipitous X-Ray Sources.  
 Papers presented at the Seventh Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, October 9–12, 1991, Tucson, Arizona.  
 816. M. Forestini et al.: Fluorine Production in the Thermal Pulses on the Asymptotic Giant Branch. *Astronomy and Astrophysics*.  
 817. A. Jorissen and M. Mayor: Orbital Elements of S Stars: Revisiting the Evolutionary Status of S Stars. *Astronomy and Astrophysics*.  
 A. Jorissen: Orbital Elements of a Sample of S Stars: Why are they not Symbiotics? Paper presented at the "XIII<sup>e</sup> Journée de Strasbourg", Advanced Stages in the Evolution of Close Binary Stars", ed. G. Jasiewicz, Strasbourg, 1991.  
 818. M.D. Johnston and H.-M. Adorf: Scheduling with Neural Networks – the Case of Hubble Space Telescope. *J.*

*Computers and Operations Research*, special issue on "Neural Networks".

819. T. Toniazio, M. Stiavelli and W.W. Zeilinger: Subsystems in Early-Type Galaxies: the Structure of NGC 6851. *Astronomy and Astrophysics*.
820. S.R. Zaggia et al.: High Resolution Kinematics of Galactic Globular Clusters. I. *Astronomy and Astrophysics*.
821. M.-H. Ulrich: The Nature of the Broad Line Region: Optical/UV/X-Ray Studies. To appear in the Proceedings of the 2nd Annual October Astrophysics Conference "Testing the AGN Paradigm", College Park, Maryland, Oct. 14-16, 1991.
822. A. Moneti: The Double Nature of RCW57/irs1. *Astron. and Astrophysics*.
823. J.R. Walsh, K. Ogura and Bo Reipurth: Two Remarkable Herbig-Haro Objects in the NGC 2264 Region. *Monthly Notices of the Royal Astron. Society*.

### Technical Preprints

37. G. Raffi: Control Software for the ESO VLT. Paper presented at the International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPS), held in Tsukuba, Japan, November 11-15, 1991.
38. M.A. Blessinger et al.: Low Noise 256 × 256 Element MWIR Infrared Focal Plane Array for Strategic and Scientific Applications. Paper presented at 1991 meeting of the IRIS Speciality Group on Infrared Detectors held at the National Institute of Standards and Technology, Boulder, Colorado, USA, August 13-16, 1991. Sponsored by ERIM, Information Analysis Center, Ann Harbor, Michigan, USA.
39. J.M. Beckers: Removing Perspective Elongation Effects in Laser Guide Stars and their Use in the ESO Very Large Telescope. Paper to be presented at the April 27-30, 1992 ESO Conference on "Progress in Telescope and Instrumentation Technologies" in Garching bei München, Germany. At the March 10-12, 1992 "Laser Guide Star Adaptive Optics" workshop in Albuquerque, NM, USA.
40. M. Faucherre and R. Maurer: On Metrology Systems for Delay Lines. H. Jörck et al.: The Design of Delay Lines for the VLT Interferometer. To be published in the Proc. of ESO Conf. on "High Resolution Imaging by Interferometry", Garching, Oct. 14-18, 1991.
41. P. Bourlon, T. Ducros and M. Faucherre: Results of Vibration Measurements on La Silla Telescopes. To be published in the Proc. of ESO Conf. on "High Resolution Imaging by Interferometry", Garching, Oct. 14-18, 1991.
42. C. Alexandrou, J.-A. Hertig and L. Zago: Wind Tunnel Tests on a Large Astronomical Telescope. Proceedings of the "Eighth International Conference on Wind Engineering (London, Canada). To appear in *Journal of Wind Engineering and Industrial Aerodynamics*. Ed.: A.G. Davenport, Boundary Layer Wind Tunnel Laboratory, The University of Western Ontario, Faculty of Engineering Science.

### VACANCY IN GARCHING

## STAFF ASTRONOMER – REF. ESD204

A position as astronomer will shortly become available in the Astronomy Group of the Science Division at ESO Headquarters in Garching near Munich, Germany.

The position will be open to an astronomer with a doctorate in astronomy or equivalent and several years of post-doctoral experience as well as an excellent record in independent astronomical research. A good knowledge of English is essential.

The successful applicant will be expected to carry out an active research programme related to observational astronomy, and to make significant contributions to the duties of the Astronomy Group.

Scientific interests in the group include large-scale structure; quasars; AGNs; dynamics and chemical evolution of galaxies; supernovae and supernova remnants; variability of early-type stars; and the diffuse interstellar medium. Responsibilities include the guidance of students and junior fellows, the workshop and symposium programme, assistance to visiting astronomers using ESO's data reduction and remote observing facilities, and interaction with other groups at ESO Headquarters in matters ranging from telescopes and instrumentation to computing and image processing.

This is a tenure track position, normally offered for an initial period of three years, renewable for a second period of three years. Tenure may be granted during the second term of the contract.

Applications – stating the above mentioned reference number – should be submitted by September 30, 1992. Application forms can be obtained from:

European Southern Observatory  
Personnel Administration and General Services  
Karl-Schwarzschild-Strasse 2  
D-8046 Garching bei München  
Germany

### New ESO Scientific Report on Star Forming Regions

ESO Scientific Report No. 11 "Low Mass Star Formation in Southern Molecular Clouds" appeared in January. The book contains 10 chapters, describing all the major southern molecular cloud complexes and their populations of low mass young stars. Each region is discussed by a specialist, and aims to outline our current knowledge about that star formation region, with very extensive references to the literature. The book is thus a tool that facilitates and encourages further studies of the rich southern star forming clouds. Researchers working in the field can request a copy free of charge as long as stock permits by writing to

ESO Information Service  
Karl-Schwarzschild-Str. 2  
D-8046 Garching bei München  
Germany

*Bo Reipurth, ESO*

### New Operating Manuals

**Operating Manual No. 10: IRSPEC**, eds. R. Gredel and A.F.M. Moorwood, Version No. 1, August 1991.

**Operating Manual No. 14: THE OPTICAL PHOTOMETER ON THE ESO 1 m TELESCOPE**, eds. H. Lindgren and F. Gutiérrez W., Version No. 1, August 1991.

### STAFF MOVEMENTS

#### Arrivals

##### Europe

GENDRON, Eric (F), Coopérant  
JØRGENSEN, Bruno (DK), Clerk (General Services)  
KINKEL, Ulrich (D), Student  
KOLB, Manfred (D), Student  
LAMBERT, David (USA), Guest Professor  
PATSI, Panagiotis (GR), Fellow  
RATIER, Guy (F), Associate  
SIEBENMORGEN, Ralf (D), Fellow  
STRIGL, Gisela (D), Laboratory Tech. (Photography)  
Young, Andrew (USA), Guest Professor

##### Chile

GREDEL, Eva (D), Student

#### Departures

##### Europe

MESSERLIAN, Suzanne (F), Secretary  
NEUMANN, Harry (D), Clerk (General Services)  
PASIAN, Fabio (I), Fellow  
ROCHE, Jocelyne (F), Programmer  
RUIZ LAPUENTE, Maria (E), Student  
STIAVELLI, Massimo (I) Fellow  
THEUNS, Tom (B), Student

### Correction

An error has been discovered in the article by K.S. de Boer et al. on "Trouble in the Magellanic Clouds!" (*The Messenger* No. 66, p. 14). The sentence starting in line 11 in the third column on page 14 should be: "This led to estimate the total number of H $\alpha$  emission-line objects in the SMC to about 4000..."