

galaxy of type Sbc (like our own Milky Way galaxy) its massive dust shows disturbances, possibly as a consequence of the fairly close proximity of the two other members of the Triplet. Furthermore, there seems to be a lot of star formation going on, as one can see in the upper right corner of the image, where numerous star-forming regions with young massive blue stars are visible. The box-like bulge of this galaxy (visible at the top of the image) is also remarkable and could indicate the presence of a central bar. A number of globular clusters can be seen as fuzzy reddish spots in the halo of the galaxy.

The field around NGC 3628 is rich in very faint galaxies, many of which can be seen in this image as slightly diffuse objects. Only a few foreground stars belonging to our own Milky Way are visible, sharp and point-like. However,

the conspicuously blue star-like object just SSW of the diffuse patch that extends more or less along the minor axis of the main galaxy, is not a star but an X-ray emitting quasar at a redshift  $z = 0.995$ .

Of special interest in this picture is an elongated low-surface-brightness feature that seems to emerge along the minor axis of the large active galaxy. It appears to be part of a chain of objects that coincides very exactly with an X-ray filament associated with ejection of X-ray material from the centre of the galaxy, as shown by observations with the ROSAT and, very recently, the Chandra satellites.

The high image quality of FORS2 on VLT/Kueyen enables resolution of the various objects along this optical feature. A spectroscopic investigation is currently under way in order to study their possible physical relationship to

events in this conspicuously disturbed, nearby galaxy.

Technical information: The colour image was composed from five individual exposures through Bessel B, V, R and I broadband filters. Exposure times were 120 + 600 sec in B, 300 sec in V, 600 sec in R and 600 sec in I. They were taken with FORS2 during the commissioning period in February 2000 and retrieved from the ESO Science Archive. The seeing on the different frames was between 0.64 and 0.8 arc-sec. The size of the field is  $6.8 \times 6.8$  arcmin; north is up, east to the left. Pre-processing was done with the FORS pipeline in Garching. Observations were carried out by G. Rupprecht, data reduction by F. Patat (both ESO/Garching), image composition by R. Hook and R. Fosbury (both ST-ECF), astronomical background provided by H. Arp (MPA). *G. RUPPRECHT*

## Coming Home at Paranal

### Unique “Residencia” Opens at the VLT Observatory

*(Taken from the ESO Press Release of 7 February 2002)*

#### Summary

The Paranal Residencia at the ESO VLT Observatory is now ready and the staff and visitors have moved into their new home.

This major architectural project has the form of a unique subterranean construction with a facade opening towards the Pacific Ocean, far below at a distance of about 12 km. Natural daylight is brought into the building through a 35-m wide glass-covered dome, a rectangular courtyard roof and various skylight hatches.

Located in the middle of the Atacama Desert, the Residencia incorporates a small garden and a swimming pool, allowing the inhabitants to retreat from time to time from the harsh outside environment.

Returning from long shifts at the VLT and other installations on the mountain, here they can breathe moist air and receive invigorating sensory impressions. With great originality of the design, it has been possible to create an interior with a feeling of open space – this is a true “home in the desert”.

Moreover, with strict ecological pow-

er, air and water management, the Paranal Residencia has already become a symbol of innovative architecture in its own right. Constructed with robust, but inexpensive materials, it is an impressively elegant and utilitarian counterpart to the VLT high-tech facilities poised some two hundred metres above, on the top of the mountain.

Ever since the construction of the ESO VLT at Paranal began in 1991, staff and visitors have resided in cramped containers in the “Base Camp”. This is one of the driest and most inhospitable areas in the Chilean



*This photo shows the Residencia, looking towards west. The linear construction used to fill the natural depression of the ground in this area is evident. The 35-m central dome protrudes from the “filled-in” valley. Photo: Massimo Tarenghi.*



A panorama of the Reception Area with the entry to the Cantine in the background. The essential construction and the warm colour of the concrete walls are clearly visible and help to give the feeling of being "at home". Photo: Massimo Tarenghi.

Atacama Desert, and eleven years is a long time to wait. However, there was never any doubt that the construction of the telescope itself must have absolute priority.

Nevertheless, with the major technical installations in place, the time had come to develop a more comfortable and permanent base of living at Paranal, outside the telescope area.

### A Unique Architectural Concept

The concept for the Paranal Residencia emerged from a widely noted international architectural competition, won by Auer and Weber Freie Architekten from Munich (Germany), and with Dominik Schenkirz as principal designer. The interior furnishing and decoration was awarded to the Chilean architect Paula Gutierrez.

The construction began in late 1998. Taking advantage of an existing depression in the ground, the architects created a unique subterranean construction with a single facade opening towards the Pacific Ocean, far below at a distance of about 12 km. It has the same colour as the desert and blends perfectly into the surroundings. The Paranal Residencia is elegant, with robust and inexpensive materials.

Natural daylight is brought into the building through a 35-m wide glass-

covered dome, a rectangular courtyard roof and various skylight hatches. The great originality of this design has made it possible to create an interior with a feeling of open space, despite the underground location.

### Facilities at the Residencia

To the visitor who arrives at the Paranal Residencia from the harsh natural environment, the welcoming feeling under the dome is unexpected and instantly pleasant. This is a true "oasis" within coloured concrete walls and the air is agreeably warm and moist. There is a strong sense of calm and serenity and, above all, a feeling of coming home. At night, the lighting below the roofing closure fabric is spectacular and the impression on the mind is overwhelming.

The various facilities are integrated over four floors below ground level. They include small, but nice and simple bedrooms, offices, meeting points, a restaurant, a library, a reception area, a cinema and other recreational areas. The natural focal point is located next to the reception at the entrance. The dining room articulates the building at the -2 level and view points through the facade form bridges between the surrounding Paranal desert and the interior.



A functional and essential room of 16 m<sup>2</sup> with all communication connections allows staff and visitor to work and rest. Photo: Massimo Tarenghi.

Simple, but elegant furnishing and specially manufactured carpeting complement a strong design of perspectives. The Republic of Chile, the host state for the ESO Paranal Observatory, is present with its emblematic painter Roberto Matta.

Additional space is also provided for a regional art and activity display.

The staff moved out of the containers and into their new home in mid-January 2002. Today, the Paranal Residencia has already become a symbol of innovative architecture in its own right, an impressively elegant and utilitarian counterpart to the VLT high-tech facilities poised some two hundred metres above, on the top of the mountain.



A series of woollen, handmade rugs were specially designed by the Chilean artist Luz Méndes, with motives from astronomical images, spectra and interferogrammes obtained at the Paranal Observatory. They decorate the common space of the building. The one seen on this photo displays the Pavo interacting galaxies. Photo: Massimo Tarenghi.



From the Cantine it is possible to observe the preparation of the meals in a modern and well-equipped kitchen. Photo: Massimo Tarenghi.