cation of techniques of image analysis as PSF subtraction, deconvolution and co-addition of images with different PSFs. Although there are some limitations (mainly due to the reliability of the models), PSF modelling yields noise-free comparison images that can be easily matched to the observed images. While for HST images a suitable model (e.g. TinyTim) is available (but there are some limitations as the lack of the scattered light contribution); for ground-based data this task is clearly more compelling given the strong seeing dependence of the PSF. From the observed shape of our NTT + SUSI star images it is found that a Moffat function, with $\beta \approx 2.1$ and FWHM that matches the seeing, is a good model down to $\sim$ 10 magnitudes below the peak flux. Beyond this level, there appears to be an excess of the observed PSF with respect to the Moffat model. Although this model could work properly for image deconvolutions and co-additions, when accurate PSF subtraction is involved (as is the case of poorly resolved faint objects) the Moffat model may not be adequate.

References

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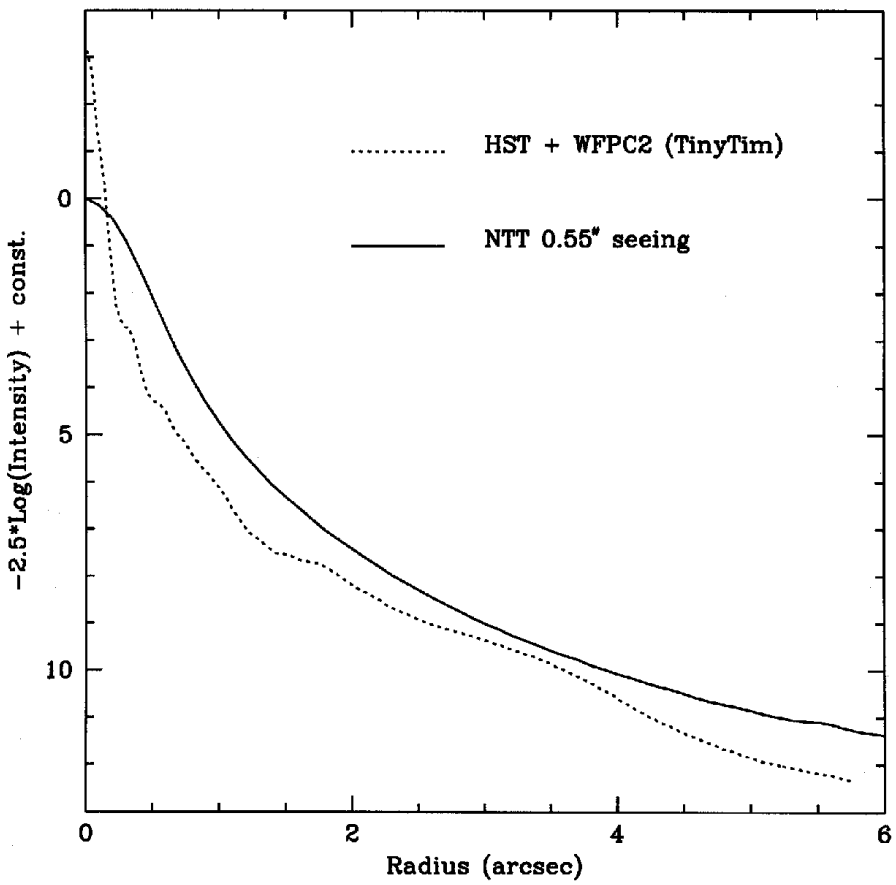

Figure 5: Comparison of NTT + SUSI observed PSF (seeing 0.55") with HST + WFPC2 TinyTim model of PSF.

Quasar Hosts

A WORKSHOP JOINTLY ORGANISED BY ESO AND IAC

P. Crane and I. Perez-Fournon

The idea that the nuclei of normal galaxies are the hosts of the tremendously luminous sources known as quasars has been around for some time. New instruments and observational techniques have opened a view into the close environment of quasars and allowed us to explore their neighbourhoods and neighbours in unprecedented detail. The ESO/IAC workshop on Quasar Hosts was organised to discuss these developments and their implications. A main objective of the workshop was to explore the nature of the close environments of quasars as well as the relationship between quasars and their somewhat less lofty cousins; Active Galactic Nuclei and BL Lac objects.

This workshop was the first formal scientific contact between ESO and the Instituto de Astrofísica de Canarias (IAC) scientific communities on a topic of mutual scientific interest. The attendees represented most of the researchers active in this field from both communities as well as from outside the ESO and IAC communities.

The workshop venue was the very attractive Conference Centre of the Cabildo Insular de Tenerife in Puerto de la Cruz. Although some people accompanying participants complained about the weather, scientific and technical discussions occupied the full attention of the attendees. The topic, the venue, and the company served well to focus the attention on the objectives of the workshop. The details of the organisation were managed in excellent fashion by the staff at the IAC.

The plenary sessions of the meeting were scheduled over three full days from 24 to 26 September with a round-table discussion and summary on the morning of 27 September. In fact, the final discussion was extremely lively. So much that the local organisers had to shift the venue from the Conference Centre to the bus for the trip to the Observatorio del Teide.

The most exciting development presented at the workshop was the quality and diversity of the new data that are or are becoming available. Of course the results from HST were foremost in many people's minds. They were not disappointed. However, adaptive-optics systems are coming into operation and although the results are sparse so far, the promise is great. This will be especially true in the near-IR where the detector technology has made great advances. Indeed, there were several reports of NIR imaging of quasars, and their hosts were reported even without adaptive optics. To add to everyone's anticipation, several speakers presented results from ISO that were in a preliminary stage of analysis, but were clearly of high quality and promise.

Many attendees were attracted to the meeting by the idea of, or at least hearing tales of, naked quasars. This was not to be, although at least one speaker facetiously thought they might be found locally. These turned out not to be quasars and the images will not appear in the proceedings. It seems that to within the limits of current methods, all quasars are well surrounded by relatively normal

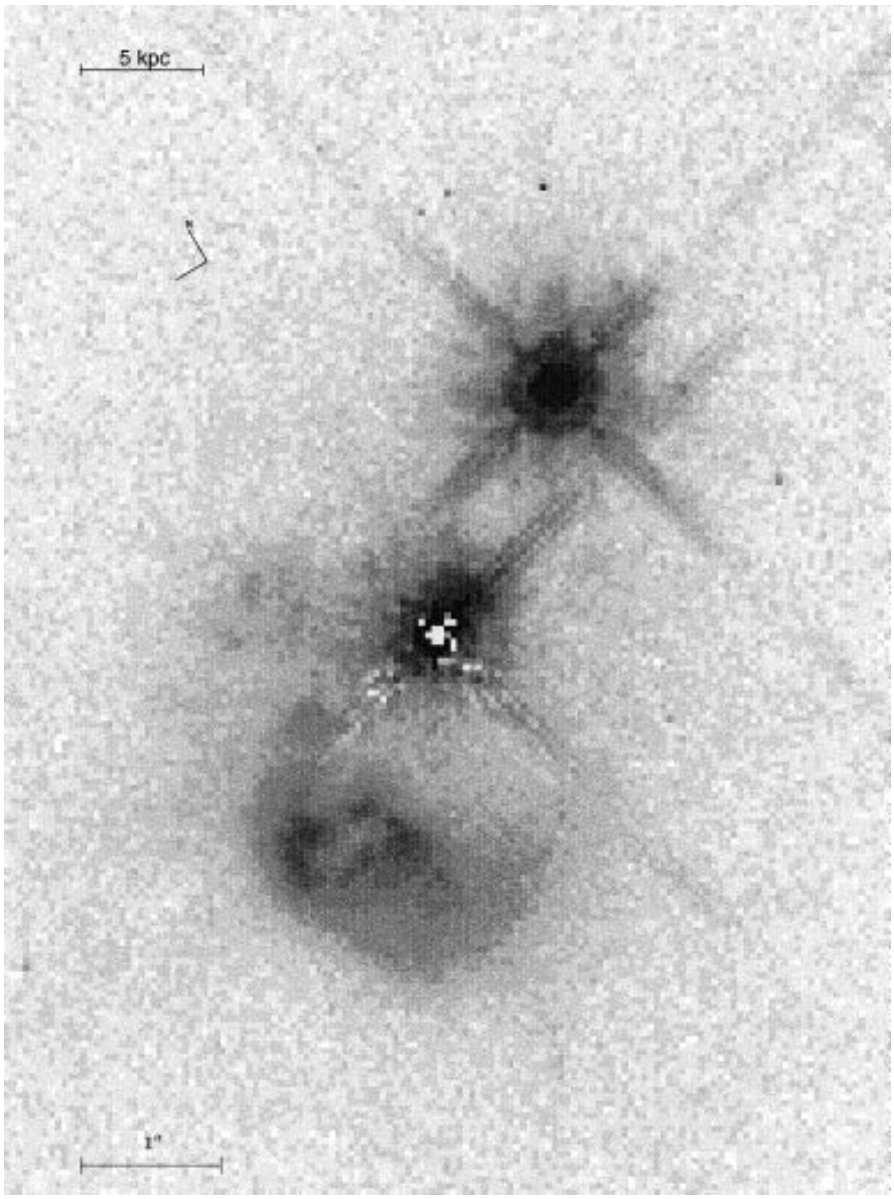

Figure 1: IRAS 04505–2958 is an infrared ultraluminous source which is also an optical QSO (i.e. by the criteria of Véron-Cetty and Véron in their catalogue). The figure shows two bright components separated by 1.6 arcsec, northernmost of which is known to be a foreground G star. Note the ring-like feature 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 ~ 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