

ESO AT THE EUROPEAN RESEARCH AND INNOVATION SALON IN PARIS

ED JANSSEN, ESO

From June 3–5, 2005, ESO took part in the European Research and Innovation Salon, which was held at Paris Expo (France). The event, organized under the auspices of the French Government and the European Commission, was the first of its kind in Europe and was mostly aimed at the general public. This first event had over 24 000 visitors, including high-ranking officials, a great success given the numerous events that took place in Paris the same weekend.

The standard ESO Exhibition (65 sqm), showcasing the observatories as well as ALMA and the plans for the OWL telescope, also included scale models and was further extended with a giant projection screen, presenting a selection of the best pictures of ESO installations and astronomical objects.

A videoconference with Paranal also took place each day, and many people took the opportunity to ask numerous questions to

staff astronomer Christophe Dumas, who kindly helped us make this event a great success.

ESO Director General, Catherine Cesarsky, gave a talk with the title 'The ESO Very Large Telescope: How to explore Space while keeping your feet on the ground', which was attended and appreciated by many visitors.



Christoph Dumas answering visitors' questions during a videoconference with Paranal.



Visit of former French Minister of Science, Education and Technology, Prof. Claude Allègre (centre), and Prof. Jean Audouze (right), chairman of the Scientific Committee of the event, at ESO's stand.

FELLOWS AT ESO

MARTIN VANNIER



I JOINED ESO IN JUNE 2003, as a fellow with duty on the VLTI in Paranal. Before this, I had had a first feeling of ESO/Chile during a six-month trainee-

ship in 1997. I remember that I enjoyed as much being in the action of a big observatory as having a taste of Chile. I then worked for a year at the European Space Agency on the future GAIA satellite. After this experience, I chose a scientific PhD, with still a large part of innovative technology, rather than an engineering career.

I did my PhD in Nice on colour-differential interferometry, a technique combining high-angular resolution and spectroscopy, which allows one to measure small displacements of the photocentre with wavelength. This mode is becoming operational at the VLTI, first with MIDI (10 microns), and now with the near-IR instrument AMBER. Among many possible applications, the most ambitious is the spectroscopy of hot extrasolar planets. This requires extremely good instrumental stability and precise monitoring of atmospheric effects. Part of my PhD was to translate these requirements into specifications for the AMBER instrument.

Therefore, it was as much a logical step as an exciting possibility to come and follow the progress of the VLTI for my post-doc. Since the arrival of AMBER last year, I have worked on data processing methods to reach the challenging goal of measuring a few 10 000th of a fringe, the required precision for detecting a "hot Jupiter" exoplanet. I am also interested in other scientific applications of interferometry: stellar binarity, symbiotic stars, velocity fields of emission-line stars, ...

I see ESO as a unique and exciting place to work. Certainly, the international diversity of its participants and the ambition of its current projects contribute to making my fellowship a very positive experience.

MARTIN ZWANN



BORN A FEW METRES below sea level, I initially felt more comfortable with low-altitude radio telescopes than optical telescopes on high mountain tops.

Consequently, my PhD work in Groningen was based primarily on radio surveys of the neutral hydrogen 21-cm line. After finishing up the thesis, I moved to Melbourne, Australia, where I worked on HIPASS, a 'blind' extragalactic 21-cm survey covering more

than half the sky. These kinds of surveys provide interesting anchor points for observations of neutral hydrogen via absorption lines from a time when the universe was much younger. One of my main scientific interests is therefore to deduce a consistent picture from these two sets of information and understand the evolution of gas in galaxies.

Late 2003 I came to Garching. One of my reasons to apply for the ESO fellowship was to venture more into spectral ranges corresponding to wavelengths shorter than the width of the page you read this on. The first step is to millimetre wavelengths. For my functional work I am involved in ALMA and I am looking forward to using this instrument to study galaxy gas components that are chemically more complicated than neutral hydrogen. Secondly, using optical wavelengths, I am trying to learn more about far-away galaxies that hold the gas that gives rise to absorption lines.

Working at ESO means being at the astronomical barycentre of Europe. It really feels that way when you have to decide if you want to attend the seventh interesting science talk in a week's time. But not only scientifically, also personally the move to Garching has been a very positive experience, especially because I became a father only two months after arriving here.