

## Fellows at ESO

### Gaël Chauvin

After studying for five years microelectronics and nuclear physics to become an engineer, I finally changed my mind in fall 1999 to join the small world of Astronomy. With a master of Astrophysics obtained in Grenoble (France), I started a thesis based on a double scientific approach: stellar physics and instrumentation.

A first part of my work was then dedicated to the study of the environment of nearby stars, to search for planetary discs and substellar companions. As this implies searching for very faint objects close to bright stars, I got involved into the development of high-contrast and high-angular-resolution instrumentation. I joined the group integrating and testing the adaptive optics (AO) system of the NACO instrument, now installed at the Paranal Observatory. Later on, with the NACO commissioning and the defense of my thesis, I naturally came to Chile in December 2003 in order to start an ESO fellowship position.

Within the Paranal Science Operation Group, I now work mainly with infrared instruments (coupled to AO). This position offers me the great opportunity to develop constantly an important observing and instrumental experience. This is necessary for my own astrophysical work, now focused on the direct detection of exoplanets and brown dwarf companions and the study of their fundamental physical parameters, the chemical properties of their cool atmosphere, as well as their origin of formation.

This experience also offers me the great chance to fulfill a personal dream, to live abroad, immersing myself in a foreign culture and knowing other people.



Emmanuel Galliano (left) and Gaël Chauvin (right).

### Emmanuel Galliano

Six years have passed since I arrived in Chile. Time flew so quickly and I almost never felt that I had to leave Latin America to return to Europe. It must be because I feel I still have a lot to learn from the people of this side of the world: they probably know better than any other folk how to connect with their emotions.

Thanks to ESO, I could discover the magic of Latin America while fulfilling a professional dream, to be an astronomer. In 1999, I came to Chile for the first time to participate in the Denis Survey, thanks to Pascal Fouqué. I consider it a privilege that I could start learning astronomical observation with a 'small' 1-m telescope, having everything under control. I then started a Ph.D. project with Danielle Alloin at ESO/Santiago. During three years I mainly tried to clarify the distribution of dust and molecules around active galactic nuclei (AGN).

At that time, operations with the interferometer of the VLT were about to start. The communi-

ty was hoping that the VLTI would finally prove the existence of one of the key pieces in the AGN model: the so-called dusty torus. A new exciting field in my research area was about to take off, and this would happen at ESO. This motivated my application for a fellowship in the VLTI team. My duties on Paranal have now been for two years to make starlight interfere, with the most advanced technology available. I broaden my observing skills in the most fascinating way.

In Santiago, I can focus on my favourite research topics: active galactic nuclei and the still mysterious embedded clusters: these bright sources, only visible in the infrared, and thought to be the ancestors of globular clusters. Nothing but the cutting-edge infrared technology offered by the VLT allows studying these objects. I guess this project has a nice future since ESO gives me the opportunity to spend my fourth year at La Universidad de Chile, where I can apply for Chilean VLT observing time.

## Science in School launched

The new quarterly European journal for science education, "Science in School", was launched at the European Molecular Biology Laboratory in Heidelberg, on 28 March 2006. After "Science on Stage" this journal constitutes the second element of the EIROforum European Science Teachers' Initiative (ESTI), which itself is part of a broader effort by the European Commission together with EIROforum and other partners to stimulate innovative science teaching in Europe's primary and secondary schools. The first issue has no less than 92 full-colour pages and covers

a wide range of topics from astronomy and physics to chemistry and biology. It also contains articles on student's perceptions of science and technology, on the teaching of 'process skills', book reviews and other education-related topics.

"Science in School" is available online and in printed form. Visit <http://www.scienceinschool.org/> to find out more and view the first issue which includes an article about 24 hours in the life of the VLT and Paranal.

