

Fellows at ESO



Carla Gil

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I decided that I wanted to be an astronomer when I first visited the Lisbon Planetarium. I was six years old at the time, and had no clue what astronomy was about! I just remember my school drawings went from being little houses and trees to stars and planets.

I lived in Lisbon until I was 18, and one day I came home and told my parents I was moving to Porto because that was the only place where I could study astrophysics. Portugal is a small country, and as you can imagine astronomy is not one of the most popular careers to pursue. However, my family was always very supportive of my choices and I was lucky to be one of the few people to be given such an opportunity.

I did my undergraduate studies at the University of Porto and after that I moved to Italy where I worked on my master's thesis at the Osservatorio di Capodimonte as part of the European Solar Magnetism Network. I started my PhD shortly after that and this time I moved to Grenoble, France.

I obtained a joint degree from the University Joseph Fourier and the University of Porto. My thesis research consisted of studying interferometry and its application to the study of ejection processes

close to pre-main-sequence stars. I worked on the AMBER instrument, the three beam combiner for the VLT, during the time I spent in France. When the instrument was shipped to Paranal I was awarded an ESO studentship in Chile, where I spent two years finishing my PhD and I had the privilege of participating in the assembly, integrations and first light of AMBER.

I joined ESO as a fellow in June 2006. My duties consisted of observing 80 nights per year at the VLTI and being instrument fellow for the AMBER instrument. I am now finishing my third year of a postdoc in Chile and soon will be moving back to Europe. One of the good things about the ESO fellowship in Chile is that it allows us to do a fourth year postdoc devoted full-time to research in any of the ESO member countries. I am moving to Northern Ireland, where I will be kindly hosted by the Armagh Observatory for the next year. After five years in Chile it is now time to start a new adventure in a different place. I am looking forward to the green landscape, but will, for sure, miss the unusual workplace I have had for the last few years where no living species can survive, apart from astronomers!

Thomas Stanke

Looking out of the window I can see buses bringing the workers from the Chajnantor plateau back to their "low-elevation" camp (3000 m above sea level). My "functional duty" work at ESO is to do service observations at the APEX telescope, located right next to the construction site of the ALMA array, at an elevation of 5100 m; if I have written anything that seems stupid, I can easily blame it on the lack of oxygen (I just walked up three steps to measure my blood oxygen, it's 85% of normal, pulse is at 110 bpm, and that's without actually doing anything). Working at APEX is one of the few possible ways to see Chajnantor and the progress of work up here on a regular basis, and yes, there is progress. Every time I come back, there are a few more antennas around, more foundations, construction spreading out, and more speed limit signs on the ALMA road up to Chajnantor!

Working at APEX, i.e., being sort of a radio astronomer, however also means being a bit of a freak within ESO, although the community of freaks (those radio astronomers, just imagine, they also observe during daytime...) is growing, with ALMA nearing the beginning of operations. As my research interests are in the field of star formation, I use observations covering a wide wavelength range, so luckily, I'm only half of a freak, doing a fair fraction of my work at infrared and optical wavelengths.

While I did of course look at the skies as a kid, with binoculars, or without, I never really planned to become an astronomer. First, I wanted to be an archaeologist (well, astronomers and archeologists do pretty much the same — try to find out about the big picture with very little information). But after a while, I became more and more interested in physics, so I studied physics in Würzburg. I always thought that it could be interesting to work in research, either on the small scale (particle hunting), or on the large scale. But it was not until I had to look around for a theme for my diploma thesis that I got hooked up with astronomy, after I had found the way to the Würzburg University Astronomy Department, hidden on the fourth floor of the mathematics building. There, Professor Yorke told me that yes, there may be some things to work on, I should talk to Herr Zinnecker, but NOW, as he was just back from travelling, and would leave for the next trip in two hours, and indeed, Herr Zinnecker found, after some digging, a DAT tape with some 10- μ m data of binaries I could work on.

Starting from 10 μ m, I then first worked my way to shorter wavelengths, and did my PhD thesis on a K-band (not the radio but the infrared one) imaging search for protostellar outflows in Orion, following Herr Zinnecker to Potsdam. The original idea of that project was to use the outflows as pointers to protostars, but as I collected my data at the Calar Alto Observatory (which can be a pretty good site, but in December there's a fair chance of getting stuck in fog for days...), the millimetre guys had time to develop ever larger bolometer arrays, and in the end I started to search for protostars directly, shifting to wavelengths 500 times longer and moving to the



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Max-Planck-Institut for Radioastronomie in Bonn. Apart from regular observing trips to the IRAM 30-metre telescope, I also took the opportunity to observe at a real radio telescope in Effelsberg, and found it very impressive that one can indeed observe in pouring rain (those radio astronomers...). During that time, I started to observe my dear outflows also in millimetre CO lines, and envisaged the higher excitation lines, possibly at higher resolution, which led to the next move to the IfA in Hawaii. The main motivation was to use the SMA, but as the IfA has access also to all the other nice things on top of Mauna Kea, I had a lot more toys to play with. And Hawaii is not only nice for doing astronomy. However, it's also a pretty expensive place to live. So, after

two years, when I was offered the ESO fellowship, we were among the very few people who are delighted to see that the rents in Munich and surroundings are quite affordable (well, at least if you have the Hawaii experience...).

But now, my fellowship is about to end. I have found ESO a very interesting place to work, having contact with the progress on the next generation of major observatories almost every day. Still, having left Hawaii's beaches and telescopes behind hurts a bit (mostly the beaches, particularly for my family), but we also love the Biergarten in Garching. Maybe you should not be too surprised then, if some day you see an original Bavarian Biergarten on your next observing trip to Hawaii.

Personnel Movements

Arrivals (1 April–30 June 2009)

Europe

Lange, Uwe (DE)	Software Engineer
Gube, Nikolaj (DE)	Legal Advisor
Schmidt, Sandra (DE)	Secretary/Assistant
Nilsson, Kim (SE)	Astronomer
Santander Vela, Juan de Dios (ES)	Applied Scientist
Justen, Benedikt (DE)	Student
Böhnert, Alex (DE)	Student

Chile

Martayan, Christophe (FR)	Operations Astronomer
Spille, Christian (DE)	Site Safety Officer
Vanderheyden, Pierre (BE)	Electrical Engineer
Marti Canales, Javier (ES)	Lead System Engineer
Amira, Maria Soledad (CL)	Executive Administration Officer
Rojas, Pascual (CL)	Electrical Maintenance Technician
Gajardo, Gabriela (CL)	Administrative Assistant – Legal
Pretorius, Magaretha (ZA)	Fellow
Lynam, Paul (GB)	Operations Astronomer

Departures (1 April–30 June 2009)

Europe

Zech, Gabriele (DE)	Software Engineer
Moloney, Catherine (GB)	Student
Spaleniak, Izabela (PL)	Student

Chile

Lidman, Christopher (AU)	Astronomer
Gutierrez, Adriana (CL)	Administrative Assistant
Scharwächter, Julia (DE)	Fellow
Monaco, Lorenzo (IT)	Fellow
Doherty, Michelle (AU)	Fellow
De Ugarte Postigo, Antonio (ES)	Fellow
Eschwey, Joerg (DE)	European Site Development Manager