

Fellows at ESO

Roger Wesson

Like many people in astronomy, I became interested in the subject at a very young age and have followed that interest all the way through to the heady world of professional science. But perhaps unlike many people, I've made several attempts along the way to escape from this world of sleepless nights and deadlines and constantly finding new things not to understand, only to find myself suddenly back in it, as if attached to it by some giant metaphorical bungee rope.

1985 saw A-Ha's *Take On Me* topping the charts around the world, Halley's Comet become visible to the naked eye for the first time in 75 years, and a young me develop an interest in astronomy. A local astronomy society had an open evening about the comet, and my dad took me along. And even though we did not see the comet at all from the light-polluted south of England, for several years I had an insatiable interest in everything astronomical.

Later my interest waned, and really the next time I thought about astronomy was when I was thinking about going to university. Browsing a thick book listing all the courses you could do at all the universities in the UK, I found "Astrophysics" fortuitously close to the start of the book. My interest in the Universe was reawakened in a flash, and so I went to University College London (UCL) to study astrophysics. There I had my first experience of observational astronomy using a 6-inch refractor at the University of London Observatory, looking at the Moon and Saturn through the suburban murk. Later, I used the 24-inch Radcliffe Telescope there, one of the largest working refractors in the world today, and measured the stellar wind velocity of P Cygni. And then in my third year, we went on a field trip to the Observatoire Haute-Provence for a most awesome week of science and fun. They had a really good coffee machine there and by the time we left I was addicted both to caffeine and to observational astronomy.

But the end of my degree saw my first escape attempt. My life plan was to travel for a long time, and then think of a life plan. Unexpectedly, an opportunity to do a PhD arose, and I decided it would be



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silly to spurn it. So I returned from the jungles of the Yucatan to UCL once again, and spent three great years studying chemical abundances in planetary nebulae.

Then came escape attempt number two, this one a little more successful. The pain of frustrated *wanderlust* had been with me for three years and I decided it had to go away. But after seven years of impoverished studenthood in London, I needed some money. Quite randomly I found a job in the UK Home Office, where I worked in the department responsible for overseeing policing. I drafted replies to be given to questions asked by MPs in the House of Commons, wrote speeches for government ministers, and helped to develop policies, guidelines and legislation.

It was all good fun, but it was a means to an end, and the end was travelling. I headed to South America, spending four months travelling from Buenos Aires to Quito via Tierra del Fuego. I spent a long time in Chile, seeing most things between the Straits of Magellan and the Atacama. I liked Santiago straight away, and I remember thinking "I could live here", without imagining that I ever actually would.

The journey ended and I found myself back in London one cold winter morning. I got another civil service job but it was much less fun than the last one had been, and I felt the pull of the bungee rope. Luck was on my side and I managed to get a postdoc back at my old haunt of UCL.

I spent a few more fantastic years in London, before finally having the great opportunity to move to Chile to carry out duties at the Very Large Telescope, and I've been here now since October 2011. On Paranal

I like to take a few minutes whenever possible to get out under the stars and see the true spectacle of a clear dark sky, which blows me away every time I see it, and convinces me that I've probably made the last of my escape attempts. Once you've connected with the Universe in the way you can at Paranal, it's hard to see how any other line of work could be as satisfying as this.

Farid Rahoui

My journey to astrophysics was long and tortuous. I was born and grew up north of Paris, in a family with a clear literary background. I am actually the only one among four siblings who embraced a scientific career, with the understanding that addition and subtraction were already science for the other three. As a child, I was not particularly interested in astronomy and could not have cared less about celestial objects such as stars, planets or galaxies. And, well, the sky in Paris is usually cloudy, which does not help. In truth, I was not really into natural sciences, which were too concrete and too empirical for me. Anyway, the experiments were usually not very co-operative, with all those chemical solutions turning red instead of blue!

No, despite a family curse, I wanted to be a mathematician. The situation evolved quite a bit when I started doing more quantitative physics in high school. I discovered that nature could be put into equations, that real-life phenomena could be well described by exponentials and other abstract functions. For the first time, teachers were telling me about all those exotic concepts, such as black holes, time dilation, subatomic particles, the Big Bang ... my choice was made, I would become a theorist.

I stuck to that plan for five years and managed to convince the University of Grenoble to give me a Masters degree in theoretical particle physics. But then, just before starting my PhD, I realised that I wanted to know something different from academia and started a real-life job as an engineer, working on signal processing for a multinational company. I quickly realised that I would not spend my life there (that's actually an understatement), but I had the great opportunity to work



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with fantastic people who taught me a lot. This is where I developed a taste for experimental work and the first time that I really used tools to build or fix things. I also had the chance to travel to several countries for my work, which was a strong incentive to stay. I eventually resigned after two years and settled down for a while in South Korea and South Africa.

Back to France, I enrolled in a Masters degree in Space Sciences at the Meudon Observatory, where I did astronomy-related things for the very first time, although my training was more focused on space missions. From then on, everything went smoothly. I did my Masters' internship at ESO Chile, working with Olivier Hainaut on simulations for extrasolar planet detection with extremely large telescopes, which were supposed to be 100 metres in diameter at that time. I had my first experience with astronomical observations there, starting with the New Technology Telescope! I liked ESO a lot, Chile even more, and I decided to stay for a PhD that I undertook in collaboration with CEA Saclay in Paris. I worked under the supervision of Felix Mirabel and Sylvain Chaty on multi-wavelength observations and modelling of neutron star and black hole X-ray binaries. These sources are very interesting because their

bolometric emission is the sum of that of different components (stars, accretion discs, outflows, jets, dust, etc.) that are strongly interdependent. They allow us to apprehend physical phenomena in extreme environments, whether strong gravitational fields or intense ionising emission. They are however strongly variable on short timescales and in all spectral domains, which forces us to observe them quasi-simultaneously with a large range of space- and ground-based instruments, which is challenging.

After my PhD, I worked for three years with Julia Lee at Harvard University, where I extended my work to active galactic nuclei and radiative transfer modelling. I now have the great honour to start my second year as an ESO Fellow in Garching before, I hope, getting a research position in France and continuing to work in astrophysics.

Personnel Movements

Arrivals (1 October–31 December 2013)

Europe	
Bethermin, Matthieu (FR)	Fellow
Dhawan, Suhail (IN)	Student
Galametz, Maud Muriel (FR)	Fellow
Ginsburg, Adam (US)	Fellow
Guerou, Adrien (FR)	Student
Husemann, Bernd (DE)	Fellow
Mc Leod, Anna Faye (FR)	Student
Pfeffer, Joel Leslie (AU)	Student
Saturni, Francesco Gabriele (IT)	Student
Zafar, Tayyaba (PK)	Fellow
Chile	
Anderson, Joseph (GB)	Fellow
Beamin, Juan Carlos (CL)	Student
Deschamps, Romain (FR)	Student
Diener, Catrina (CH)	Student
Ertel, Steve (DE)	Fellow
Lorca, Rodrigo (CL)	Procurement Officer
Marsset, Michaël (FR)	Student
Perrault, Florence (FR)	Contract Officer
Yang, Bin (CN)	Fellow

Departures (1 October–31 December 2013)

Europe	
Bayo Aran, Amelia Maria (ES)	Fellow
Bramich, Daniel (GB)	Astronomer
Costigan, Gráinne (IE)	Student
Feltre, Anna (IT)	Student
Huckvale, Leo (GB)	Student
Kains, Noe (BE)	Fellow
Sanchez, Joel (MX)	Student
Scicluna, Peter (GB)	Student
Stoffer, Christina (CH)	Administrative Assistant
Urrutia-Viscarra, Paula Maria Fernanda (CL)	Student
Chile	
Bascunan, Rogelio (CL)	System Engineer
Carter, John (FR)	Fellow
Ebensperger, Carlos (CL)	Drawing Designer
Fluxa, Juan Carlos (CL)	Electronic Engineer
Guzman, Leonardo (CL)	Contract Officer
Lavin, Octavio (CL)	Mechanical Engineer
Miccolis, Maurizio (IT)	System Engineer
Nakos, Theodoros (GR)	Test Scientist
Pauwels, Evert (NL)	Product and Quality Assurance
Saulder, Christoph (AT)	Programme Manager
	Student