

ESO Fellows and faculty members interested in planet formation. Our meetings have been rich with ideas and we have already written a few proposals together. I hope for many more.

Observing duties on Paranal make a whole different world. We are telescope operators, engineers, astronomers, and living-support staff engaged in efficient, unrelenting and voluminous production of science. The work is physically hard for all of us up there, but this shared sacrifice, shared responsibility, and moments of shared celebration create perhaps an unusual sense of fellowship between us. We are different up on

Paranal from how we are when we are down in Santiago doing our research. I am sure the sharing of arduous and rewarding work and the rotation of supervision roles grew somewhat out of necessity. Although it is not as egalitarian as I am making it sound, I think that whatever camaraderie we experience up there comes from the supportive and unusually interwoven roles we play.

At the end of this piece, I feel obliged to look at the bigger picture. Even now, some of the most interesting things about the world are not reaching us. We may have the most technically advanced communication system in the history of our

existence, but it misinforms us to the point of self-destruction. As we have poured our labour into astronomy, I am sure that many of us have tried to work against climate destruction on our planet. We are just past midnight in the century, perhaps a fateful century for humankind. Whatever else I do, I am glad to be doing one of the things that proves that we were worth saving.

It is a cold May night in Santiago. I am going to call my wife now and tell her that I have finished writing. She joins ESO in November. It will be warm in our apartment then.

Fellows at ESO

Gabriel Brammer

Blame it on Hale-Bopp. I was a high-school student who enjoyed physics and mathematics when that comet made its trip through the inner Solar System, becoming easily visible to the naked eye on crisp spring nights in central Iowa. I was captivated by the comet and soon started taking out a small telescope that my parents had bought, exploring planets, nebulae and star clusters visible from only a short drive away from the city lights. I've been an observational astronomer ever since.

I am fortunate to have studied and worked in the field of astronomy at a time when travelling to remote observatories is still a critical component of research. To efficiently schedule observations at the most advanced, complex observatories in the world, such as the ESO Very Large Telescope, observations are increasingly carried out by professional observers, and the data are shipped electronically to research astronomers around the world. While the quality of the data is spectacular, part of the experience is lost: I feel a



Gabriel Brammer

visceral connection to the science of astronomy when I watch an enormous telescope track the night sky and I wait, perhaps for many hours, while it soaks up the light from a distant galaxy.

And this is to say nothing of the fact that observing often requires travelling to some of the most beautiful places on Earth. (If you meet an astronomer at a party and run out of things to say, we're

always happy to talk about airline frequent-flyer programmes.) My undergraduate and PhD research has taken me all over the world, from telescopes in Arizona to a total solar eclipse in Zambia. Now an ESO Fellow, I spend a week per month on a mountaintop in the Atacama Desert in northern Chile.

My own research, started during my PhD education at Yale University and



Comet C/2011 W3 (Lovejoy) captured over Paranal in December 2011 while the laser guide star was operating from VLT UT4. One of Gabriel Brammer's photographs from the ESO Photo Ambassador programme.



Caroline Foster

continued now at ESO, is aimed at studying how galaxies form and evolve. Using telescopes such as the ESO VLT and the Hubble Space Telescope I search for, and then characterise, distant galaxy populations, from low-mass starburst galaxies to monster galaxies with masses already more than ten times the mass of the Milky Way only a few billion years after the Big Bang. By taking snapshots of these galaxy populations at different cosmic times, we can develop an understanding of the dominant physical processes that shape galaxies as we see them today.

Galaxies and cosmology involve scales of space and time that are difficult to comprehend, although these scales become slightly more accessible, and exciting, sitting at the telescope and recording the light from vibrating hydrogen and oxygen atoms many billions of light-years away.

Astronomy is an international discipline, and ESO stands out as an inspiring model of international collaboration. At ESO I have developed friendships and collaborations in Chile, Europe and many other countries around the world. I also appreciate the opportunity at ESO to communicate my excitement for astronomy with the general public, through media interviews, presentations to school groups, and sharing images of the VLT site through ESO's Photo Ambassador programme. Perhaps appropriately, those of my photos that have found the most enthusiastic reception have been of the

comets that recently graced the skies over Cerro Paranal.

Caroline Foster

I remember watching my dad building or taking things apart for hours as a child. I was always curious about how everything works. Growing up, I was not a particularly talented student; in fact I did not really like school at first. All that changed with my first physics class! I was (and still am) mesmerised at how elegantly mathematics describes our world! My first love was definitely for physics, astronomy came later.

Hence, I became a rather enthusiastic physics and mathematics undergraduate student at Bishops University in Sherbrooke, Canada. As a side project, my university opened a small observatory for public outreach. The small telescope (21 inches) was setup on the roof of my university. Volunteers were needed and I gladly helped out. I learned a great deal about the night sky and wondered about how it came to be.

When graduation came up, I realised that I still wanted to study physics. So I enrolled into a Masters degree at Bishops in astronomy... I had heard about immense regions of our Universe that were completely devoid of matter and was fascinated. I would write a thesis about "nothing"... or to be more technically correct, I would study cosmological voids!

I subsequently completed a PhD at Swinburne University in Melbourne, Australia, in observational extragalactic astronomy studying the assembly and chemical enrichment history of nearby galaxies. This gave me the privilege to use data from and observe at remote telescope facilities. Coming down from some observatory headquarters after my first-ever "professional" observing run I realised that I'd love to work at an observatory. I'd imagine myself watching sunsets above the clouds on a regular basis, getting accustomed to extremely dry and oxygen-deprived remote places and taking real photos that look like they must have been photoshopped!

In June 2011, I was thrilled to begin my position as an ESO Fellow in Chile. I have since been sharing my time between research in Santiago and support at Paranal as VIMOS instrument fellow and supporting night-time operations on UT3. Paranal feels like home, my colleagues are like family and the whole ESO experience has been very positive. It is with a pinch of sadness that I will leave Chile next month to start a new position at the Australian Astronomical Observatory. The skills learned and friendships created during my Fellowship will however always be with me.