

Research using the Paranal, La Silla, and now ALMA, sites was of course well represented.

Science Days have to be well organised, so all speakers have to deliver their presentations in advance and all run from the same computer. Of course the role of the chairs is particularly important to the smooth running of the day and this forms excellent training for Fellows and Students. For the end of the Science Day, the Bavarian tradition of *Bier und Brezen* has been adopted (borrowed

from the closing session of workshops at the neighbouring Max Planck Institute for Extraterrestrial Physics). This year it was particularly encouraging that so many participants attended for the whole day, avoiding the increasingly common and taciturn practice of turning up one talk before one's own, and leaving one talk later. The gain for the participants is tremendous and the exposé of current high-level astronomical research can be a stimulating encouragement to one's own work.

Acknowledgements

Christina Stoffer has, since their inception, run the logistics of the Science Days in Garching, assembling the programme and ensuring that all the presentations are installed, and, not least, arranging the catering. We thank her very much for her dedication, without which such busy programmes would not be possible.

Links

¹ List of scientific staff in Chile: <http://www.eso.org/sci/activities/santiago/personnel.html>

² List of scientific staff in Garching: <http://www.eso.org/sci/activities/garching/personnel.html>

Fellows at ESO

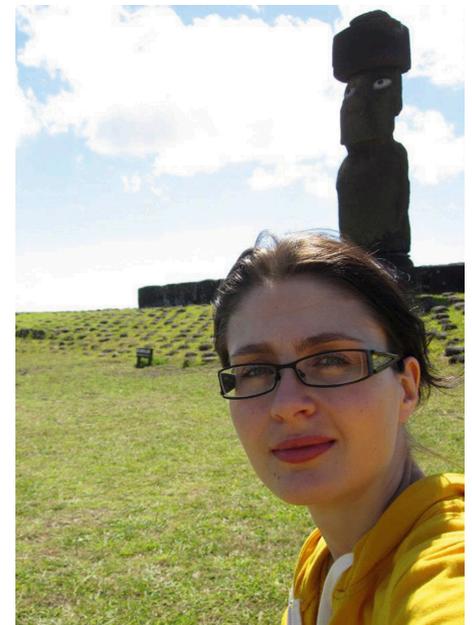
Andrea Mehner

During my childhood, growing up in Berlin, I only remember seeing the Moon and very few stars. It wasn't until much later in life, at university, that I witnessed the beauty of a clear and dark night sky. I was born in East Berlin, and growing up there it was unimaginable that I would one day live in Chile and work for an astronomical organisation. However, even then, I had the desire to travel and see the world. In elementary school I was fascinated by maths and I decided to study mathematics in Moscow. This plan obviously never came to fruition. The Wall came down, and instead I had the opportunity to live in England, Spain, the United States and now Chile. Also, I did not study maths, but first physics, and then astrophysics.

During my university years, I wavered between nuclear physics and geophysics, before settling on astrophysics. The first astronomical event I took part in was the transit of Venus in 2004. At the end of the same year I saw Saturn's rings for the first time, through an amateur telescope in the Sierra Nevada, Spain. Back in Germany, Dr Eike Guenther inspired me to pursue a career in astro-

physics. I attended some of his lectures and he displayed such an enthusiasm for the subject that I asked him to supervise my Diploma thesis at the Karl Schwarzschild Observatory in Tautenburg, Germany. Thanks to his enthusiasm, but also his entertaining stories about observatory trips, I developed a growing interest in astrophysics and astronomical observatories. During my thesis I had my first observing experiences at the observatories in Tautenburg, La Silla, and Calar Alto and enjoyed them so much that I became convinced that I would follow a career in an observatory.

In 2007, I moved to the Twin Cities in Minnesota, USA, to obtain my PhD. People may know Minnesota for its cold weather, its 10 000 lakes and its zillions of mosquitoes. Yet, there is also an astronomy department with small groups covering a rather large variety of topics. There I was confronted with Eta Carinae for the first time, one of the most massive and luminous stars in the Galaxy. I find this object so fascinating that I spend most of my time trying to understand the enigma it presents. In a nutshell, η Car is an evolved star with a mass of likely more than $100 M_{\odot}$, which may end its life any moment, or, let's say, within the next



Andrea Mehner

10 000 years. The star shows intriguing variabilities on several time and magnitude scales. This object is also one of the most beautiful in the sky and has remained a mystery to researchers for many centuries. Hubble Space Telescope

images show η Car's bipolar lobes from material ejected in its Great Eruption in the mid-19th century in great detail.

Eta Carinae has been observed over the last few decades with a myriad of instruments and thus there are many high-quality archival datasets to play with. My work focuses on the nature of η Car and its variabilities, using mainly ultraviolet to near-infrared data. In recent years, I have broadened my research to evolved massive stars in general. I am interested in high-mass supernova progenitors and how they behave shortly before exploding. Objects of interest include luminous blue variables, Wolf-Rayet stars, and blue and red supergiants.

I feel privileged to have been awarded an ESO Fellowship. The past two years at ESO have been a unique and great experience. I value the insights I've gained with regard to the process of observational astronomy, observatory operations in general, the instruments, observing strategies, data quality, data reduction, and the final science output. I also greatly appreciate the ability to be connected to many research areas through the service mode observations. Since my first visit to Paranal I've been fascinated by this place. The telescope platform under an orange sunset is truly spectacular and makes you feel as if you've been transported to some serene distant world. It feels like a dream to play with one of the four monster telescopes that sit on top (I support Unit Telescope 2 with the instruments X-shooter, FLAMES, UVES). This girl from East Berlin is extremely grateful, somewhat fortunate, and, for sure, happy to work here at Paranal.

Timothy Davis

My path towards becoming an astronomer was a winding one, and only brainwashing, luck and good fortune bring me here to ESO today. I was born in Cambridge, UK, but grew up just north of London. My father has a doctorate in biochemistry, and my mother is a teacher, and so science was always around as I was growing up. My father would bring home chemicals from the lab to replace shop-bought cleaning fluids, and on one memorable occasion we had a liquid



Timothy Davis

nitrogen cylinder sitting in the kitchen for weeks! I also had the (northern) constellations painted on my ceiling in glow-in-the-dark paint, so I went to sleep every night under the stars.

At school I did well in maths and science subjects, but it was aeronautics that really fascinated me. I would go to air shows any chance I got, and always dreamed of becoming an airline pilot. When it came to choosing my A-levels (the qualifications we take aged 16–18 in the UK, which determine your university options) I based my choices around maths and physics, as these are required for pilot training. My hope at that stage was to go to university, study something like aeronautical engineering, and then go on to pilot school.

It was in my A-level physics class that one of the first twists in the road that led me to ESO took place. We had an excellent teacher who filled us with enthusiasm for physics (as well as regaling us with tales of his adventures while teaching physics in Uganda, pre Idi Amin). I am sure he brainwashed us at some stage during those two years, as when the time came to apply to university, I chose physics without hesitation, as did ten out of my class of twelve students!

At the time I had no inkling that I would end up in astrophysics, and chose to

do my degree at the University of Warwick in the UK. Warwick has a good reputation for physics, but at the time did not offer astrophysics. Luckily, during the time I was there they started an astrophysics group, and it was during a third-year course on galaxies that my interest in the subject really awakened.

I was fortunate enough to be allocated a masters project in the astrophysics group, studying X-ray evaporation of exoplanets. This first taste of real astronomical research was eye-opening, and this was when I first started considering studying for a PhD. I sent in various applications for PhD places around the UK, while simultaneously applying for "real world" jobs. In the end I decided to follow my passion over money, turning down a job as a nuclear physicist at Sellafield (the UK's nuclear reprocessing site) to start a PhD in astrophysics.

When applying for PhDs, I was unsure which area of astrophysics I wanted to enter. Warwick at the time had a very focussed department, studying binary stars and exoplanets, so I did not feel I had experienced enough subfields of astrophysics to narrow down my applications. I knew that I wanted to do an observational PhD, and in a field where I would be able to actually visit the telescopes! This led me to select a project

investigating the properties of the molecular gas in early-type galaxies (using millimetre-wave single-dish telescopes and interferometers), under the supervision of Dr Martin Bureau at the University of Oxford.

Looking back, my three-year PhD went quickly, in a flurry of observing runs (at the IRAM 30-metre single-dish telescope and the CARMA interferometer), proposals, paper writing and talks. I spent four months visiting UC Berkeley to work with the CARMA group there, and also

some time learning modelling techniques with the group in Nagoya, Japan.

Soon it was time to apply for postdocs, and as a European astronomer who was excited about ALMA, ESO seemed an obvious place to apply. Luckily I was selected, and started my Fellowship here in Garching in October 2011. I am really enjoying my time here so far. Munich is a fun city, with so much to see and do, and the scientific life at ESO is vibrant and fulfilling. As I write this I am sat in Chile, at the ALMA Operations Support

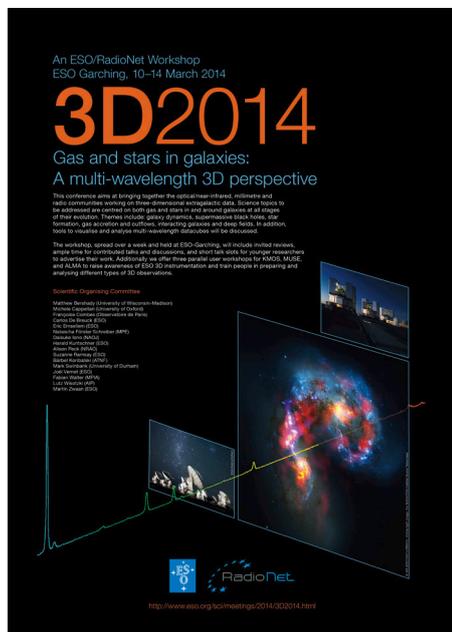
Facility, waiting to begin my night as an Astronomer on Duty — an opportunity I couldn't have got at many other places in the world!

It's unfortunately already time to start looking for my next job. I don't know where I will end up, but my hope is to continue my astronomical career — building further on the lessons and experiences gained during the wonderful time I have spent here as an ESO Fellow.

Announcement of the ESO Workshop

3D2014 — Gas and Stars in Galaxies: A Multi-wavelength 3D Perspective

10–14 March 2014, ESO Headquarters, Garching, Germany



This workshop follows from the first ESO meeting on extragalactic 3D multi-wavelength astronomy held in 2008 and aims to bring together the optical/near-infrared, millimetre and radio extragalactic communities. The kinematics, mass assembly and evolution of galaxies has been explored in large samples in the optical and near-infrared by the SAURON/ATLAS3D and CALIFA surveys of nearby galaxies and the SINS and MASSIV surveys at $z \sim 1-2$. The second generation VLT instruments KMOS and MUSE are taking up science operations in 2013/14 and ALMA is conducting Cycle 1 observations and preparing for new observing modes. The timing is perfect to evaluate the scientific progress made since 2008 and topics to be addressed are centred on both gas and stars in and around galaxies at all stages of their evolution.

Targeted workshop themes include: dynamics of nearby galaxies, starbursts and interacting galaxies, supermassive black holes and active galactic nuclei, gas accretion and outflows, high redshift galaxies, cosmology and deep fields. In addition, tools to visualise and analyse multi-wavelength datacubes will be discussed. The format will include invited reviews, contributed talks and discussions, with short talk slots for younger researchers to present their work. Additionally three parallel user workshops for KMOS, MUSE and ALMA will be offered to raise awareness of ESO 3D instrumentation and introduce observation preparation, data reduction and analysis of different types of 3D observations.

The deadline for registration is: 1 December 2013.

Details are available at:
<http://www.eso.org/sci/meetings/2014/3D2014.html>
 or by email to: gal3d2014@eso.org