

## New Staff at ESO

### Jonathan Smoker

Although born in Chicago, I was brought up on a smallholding in rural England. Amongst the chickens, sheep, goats, windmill and methane digester could be found a 6-inch Newtonian telescope that my Dad had made out of a plastic tube and a mirror that someone had given us. So, that's how I became an astronomer! Although I can't quite remember the Moon landings, one thing that I do recall clearly came later, in the 1970s, when Viking touched down on Mars and "discovered" life there, and later on the first shuttle launch.

I went to university in Manchester for my undergraduate degree, then did my PhD in radio astronomy at Jodrell Bank, studying the neutral hydrogen content of low surface brightness and blue compact galaxies, but also doing a bit of imaging and spectroscopy. After a six-month spell living in a tent at Jodrell, I switched to system administration at the Institute of Astronomy in Cambridge, before moving to Queen's University, Belfast, working on the Magellanic Bridge and high velocity clouds. I went on 22 observing trips in four years, giving me enough experience to be able to apply for a staff position at ESO in 2002. After a year or so I was lucky enough to be involved in the science verification of FLAMES, for which I later became instrument scientist. It still amazes me how the robot can place so many fibres with an accuracy of a fraction of an arcsecond! After a spell back in Belfast and travelling in South America whilst working on my laptop, I returned to ESO in 2008, again initially working on FLAMES-UVES, but who knows what the future will hold? One of the great things about ESO is that there are always opportunities to work on new projects, although balancing observatory work, science and the odd trip to the Andes is always a challenge!

My research is concerned with probing the tiny-scale (astronomical unit) structure of the interstellar medium, using UVES to observe early type stars at high resolution and twin epochs. I have also dabbled as a collaborator in high latitude stars and typing the precursors of supernovae.



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Although working on Paranal can be tiring, it is balanced by the satisfaction of being part of a team that has contributed so much to astronomy over the last 10-plus years. There is nearly always something new happening on the mountain (APE is testing on Melipal and a GRB Target of Opportunity has arrived as I write these words)... may that stay the same for years to come!

### Wolfgang Wild

In November 2008 I took up the position of Head of the ALMA Division and European ALProject Manager. Having worked in the field of sub-/millimetre and far-infrared instrumentation and astronomy

for quite some years, I am enjoying the new challenges presented by the Atacama Large Millimeter/submillimeter Array (ALMA) project and this large international collaboration.

Working and living in the Munich area again is a pleasure after 18 years of "venturing" through the world at different institutes and observatories. After studying physics in Munich and obtaining a PhD on submillimetre instrumentation and astronomy in 1990, I moved to Chile to work at SEST (Swedish-ESO Submillimetre Telescope) as an ESO fellow on La Silla. These were interesting times both at the telescope and in Chile — the country had just made the transition to a democracy. I much enjoyed the variety of tasks



Wolfgang Wild

in the small SEST team, ranging from helping visiting astronomers and doing my own astronomical research to improving the system and solving technical problems (I remember once crawling inside the antenna structure at night trying to find a short circuit). The good working atmosphere at La Silla and the friendly people and natural beauty of Chile also contributed to memorable years.

When the ESO fellowship came to an end I had the opportunity to become Site Manager of the Pico Veleta Observatory near Granada in southern Spain. The observatory belongs to the French–German–Spanish Institute IRAM (Institut de Radio-astronomie Millimetrique) with its headquarters in Grenoble (France). During my years at the IRAM 30-metre telescope, I was responsible for the operations and improvements of the observatory together with a group of scientific and technical experts — an interesting job that taught me a lot. I also enjoyed life in Granada and married a “Granadina”.

However, after nine years of working at telescopes, by around 1999 it was time for a change and I wanted to go back to instrumentation development. At that time, ALMA was just about to become a joint project between Europe and the US. It

was still called “MMA–LSA” (Millimeter Array/Large Southern Array), which was a merger between two similar, but different, interferometer projects in the US and Europe. Following various meetings and discussions, the MMA–LSA evolved into the ALMA project, and with the participation of East Asia (Japan and Taiwan) and Canada, ALMA developed into what it is today — a large international collaboration to build a new interferometer at a high site in Chile. Wanting to contribute to ALMA on the instrumentation side, I heard of a new group being built up in the Netherlands for the development of the ALMA Band 9 receivers, one of the challenging high frequency bands. I applied for the position of Project Manager and group leader and was hired as the first person in this new undertaking between NOVA, the SRON Netherlands Institute for Space Research and the University of Groningen.

Those early ALMA days were quite exciting — I started by hiring another person, so we began with two people, many ideas, an empty lab, a budget (never enough of course) and a lot of enthusiasm. Today, almost ten years later, the group in Groningen comprises twelve people and has built nine state-of-the-art receivers for ALMA with another 60+ to be built over the next few years. During

these early ALMA days, from 1999 to 2002, I was also the European Receiver Team Leader working closely with colleagues from North America and Japan on the design of the ALMA receivers. It looked like I would stay with ALMA for quite a while, but then in 2002 there was the opportunity to contribute to a space instrument in the same institute, and I worked on HIFI (Heterodyne Instrument for the Far-Infrared), one of the three instruments onboard ESA’s Herschel Space Observatory, foreseen for launch on an Ariane 5 rocket in April this year. In 2004 I was appointed Head of SRON’s Low Energy Astrophysics Division (with HIFI being the major project), and from 2007 onward I became responsible for SRON’s infrared and submillimetre programme as Programme Scientist. During my time at SRON I also held a position at the Kapteyn Astronomical Institute of the University of Groningen, and in 2005 I was appointed Professor for Techniques of Far-Infrared and (Sub-)Millimetre Astronomy.

I am very happy to be part of ESO again, and with such exciting projects like ALMA and the European Extremely Large Telescope I am looking forward to these great new observatories and the science they will enable.



Sunset over the ALMA Test Facility (ATF) in Socorro, New Mexico. The prototype US and European antennas, shown here, were used for testing and development of hardware and software and were interferometrically linked (see ESO PR 10/07). The ATF closed in December 2008, having successfully fulfilled its purpose.

Credit: ESO/L. Testi