

and graphic artists can now manage the publication workflow and publish the completed *Messenger* issues directly to the web. Metadata for *The Messenger* can now be easily exchanged through Marathon automatically with the Astrophysics Database System (ADS), the primary literature search tool for astronomers worldwide. Thus author and title information are available in ADS for all *Messenger* articles together with access to the full text.

Additional metadata curation is being planned alongside improvements to the underlying systems and interfaces. In the meantime, *The Messenger* issues and articles are available through the current interface¹. *The Messenger* can also be accessed through the social publishing website Scribd² and visibility has increased through Google.

The Messenger digitisation and archiving project is a result of the hard work and support of Marco Schilk of InduPrint, Lee Pullen, Jeremy Walsh, Jutta Boxheimer, Uta Grothkopf, Martin Cullum, and Maria

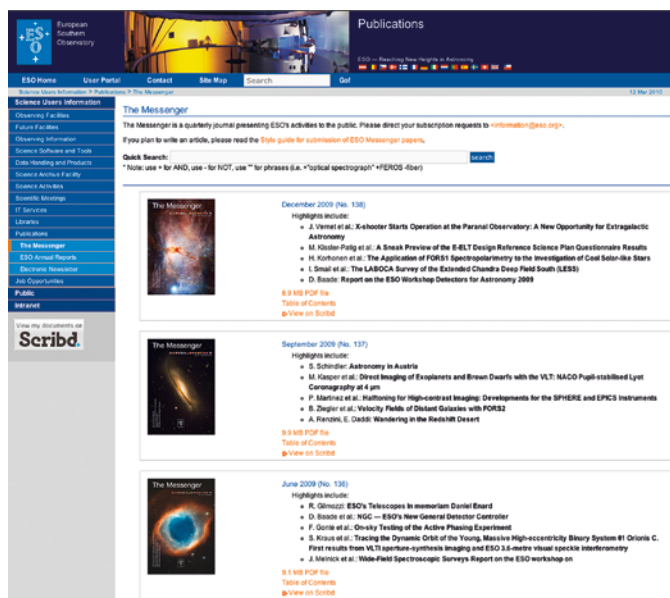


Figure 1. The ESO web page with access to back copies and content of *The Messenger*.

Eugenia Gómez, under the direction of the author. Future developments will be under the direction of Lars Holm Nielsen, Web & Advanced Projects Coordinator for ePOD.

Links

¹ The Messenger: <http://www.eso.org/sci/publications/messenger>

² Scribd: <http://www.scribd.com/>

New Staff at ESO

Daniel Bramich

I am a mathematician turned astronomer. I studied maths at Christ's College, Cambridge, from 1997–2000, specialising with my last year in theoretical astrophysics. Not convinced I was ready for a PhD, I spent a year working as a student support astronomer at the Isaac Newton Group (ING) in La Palma, Canary Islands. The time on La Palma sparked my interest in data reduction algorithms and observational techniques, which became an essential part of my work during my PhD, which I carried out under the supervision of Keith Horne in St Andrews. The result of my PhD thesis was a non-result, in that I was looking for a transiting planet and did not find any. However, a null re-

sult can be important, and the thrust of my thesis was the calculation of limits on the hot Jupiter planet fraction in the open cluster NGC 7789. Today I am still looking for a transiting planet of my own, and although many have been discovered, they still elude me!

My life seemed to go backwards and forwards between the Canary Islands and the UK, from the sun to the clouds and back again! The last year of my PhD (2004) was spent in Tenerife, and I subsequently carried out short contractual postdocs at St Andrews, Liverpool John Moores University and Cambridge University (2005–2006). By the end of these periods it was clear that my interests and work concentrate on both science

and the algorithms and data used to carry out the science, which also suits my strong mathematical background.

Yearning for some more sun, I spent the next three years back on La Palma as a Support Astronomer for the ING, where I expanded my observing experience with the large suite of instruments available at the WHT. My research time was invested in the technique of difference imaging, and I developed a new method for matching the point spread function between two images, with minimal assumptions about the shape of the matching convolution kernel. The method is now starting to prove more robust than the traditional method, and my implementation is now part of an automatic

pipeline in use by at least five large collaborations, searching for planets, variable stars and supernovae.

I arrived at ESO in September 2009 to start work in the Science Data Products (SDP) group in the Data Management and Operations (DMO) department. My presence doubles the size of SDP: I am sure that my supervisor is very pleased about this because he now has someone to whom to delegate! The number “two” seems to feature strongly in this group at other levels, since both its members have twin daughters.

My work at ESO involves verifying the algorithms that are used in the data pipelines for the VLT instruments, and checking that the resulting data products are of sufficient quality to be used for scientific purposes. I am also involved in the testing of ESO pipelines, validating the documentation and providing guidance on the implementation of scientific algorithms. I enjoy working alongside the software engineers who are actually writing the code to do the data processing since it is clear that the results of the collaboration are much better than if either group were to work alone. The software engineers appreciate the insight into the purpose of their software, and the astronomers appreciate a well-written and robust code for data processing. In fact “astronomers” and “good programming technique” are two things you rarely find together!

The other aspect of my work at ESO is my research, which now directly feeds both ways into the operational side of my job, because of my interests in data reduction algorithms. I am confident that as a result I can provide useful expertise to ESO data reduction operations, and that in return I will learn about new areas of data reduction that may help inspire my work into new algorithms.

Elizabeth Humphreys

I seem to keep moving to cold places, so Munich was definitely on the cards when I saw the position of ESO ALMA Regional Centre Astronomer advertised last year. Apart from being British, so obviously very used to bad weather, I've spent the past ten years first as a post-



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doctoral fellow at Onsala Observatory, Sweden, followed by a postdoctoral research position and then staff member of the Harvard–Smithsonian Center for Astrophysics, Massachusetts. Both places that have pretty serious winters, so I haven't been phased by all the snow here yet!

I've really liked all of my jobs, and it's been an adventure to live far away for a while, but when I saw an ALMA position that also involved moving closer to home and back to Europe then I couldn't resist. ALMA is literally going to revolutionise all of the research I am planning to do, so I'm really excited to be more involved with the project and see it develop in close up. Literally in close up, as in the autumn I will be going to Chile for six months to work directly with the ALMA commissioning team at Chajnantor.

My research mainly takes advantage of astrophysical masers, which can be used as tools to determine astronomical source conditions, kinematics and magnetic fields. In my PhD at the University of Bristol, UK, this involved studying the mass loss process of evolved stars. I went on to work on the central parsecs of active galactic nuclei, where masers can also be used to obtain high accuracy black hole masses and geometric source distances. This is leading to new avenues of research for me in the realms of the extragalactic distance scale, and determination of the nature of dark energy. I never thought that I'd be researching top-

ics like these when I started out! I'm also interested in the formation process of massive stars, a problem that is in general still far from being understood.

I feel really lucky that I've been able to diversify research topics since being a student, and am now looking forward to the new directions and collaborations that this move to ESO will bring.



Elizabeth Humphreys