## Fellows at ESO

## Thomas Bensby

Having entered a new decade twice within just a few weeks, I realise that time is passing really quickly. It seems that we just came to Chile, and now it's already time to leave. However, considering that the family has grown here in Chile, and that the most recent addition is almost two years old, it must be true. Three years in Chile, but where did the time go?

The short answer: Paranal!

Longer answer (with a prelude): During my PhD, which I finished in 2004 at Lund Observatory in Sweden, I worked on detailed elemental abundance studies of the Galactic thin and thick discs. It was during this time I had my first observing experience with the FEROS and the CES spectrographs on the ESO 1.5-metre and 3.6-metre telescopes on La Silla, and the SOFIN spectrograph on the Nordic Optical Telescope (NOT) telescope on La Palma. Before coming to Chile in 2007 as an ESO Fellow I spent three years as a postdoc at the University of Michigan. Originally I was supposed to do theoretical work on models of chemical evolution, but, as Michigan is a partner in the Magellan consortium, I could not resist applying for observing time. I ended up doing a lot of observing (and less modelling), with the MIKE and the IMACS spectrographs (the latter with multi-slit masks). Naturally, as a consequence of my experience with high resolution spectrographs I have, during my time here at ESO, been a support astronomer on the VLT Kueyen (UT2) telescope with its excellent set of instruments, including the UVES and FLAMES spectrographs. Now with the X-shooter spectrograph installed, UT2 is a Mecca for spectroscopists. I have been fortunate to have been a (small) part of UT2 for a few years, and am really looking forward to coming back as a visiting astronomer.

Outside of Paranal, Chile has offered, given, and also taken a lot. Six months of summer is great, living close to the Andes with spectacular natural environment all around is great, having vineyards everywhere is great, 45 minutes to the ski resort is great, and one hour to the beach is great. Being robbed of all valuables upon arrival at the airport is of course



Thomas Bensby and family

bad. The greatest gift here in Chile has been our third daughter Mira, the only Chilean in the family. Even though the Spanish language has (at least for me) not been easy, our other two daughters Sofia and Alva are, after our "tour de las Americas", trilingual, happily speaking Swedish, English and Spanish. So, after six years "on tour" it is with mixed feelings we go back. Anyway, it will be great to once again be able to eat good cheese and feast on pickled herrings.....

## Paula Stella Teixeira

My story begins when I was told, as a very young child, what my name, Stella, meant. I have been fascinated by the stars ever since! I was born and spent my childhood under southern skies, and I remember identifying the Magellanic Clouds and the Coalsack, knowing these were famous astrophysical objects, but not knowing (yet!) what exactly they were. My family encouraged my interest, particularly my brother, who gave me a telescope when I was seven years old and who often took his little sister to science museums. My curiosity made me continue to wonder about the Universe, and so I grew up with a dream of becoming an astronomer.

I embarked on a path which began with a Physics undergraduate degree at the University of Lisbon, Portugal. I stayed on for an MSc in Astronomy and Astrophysics and enrolled in a PhD programme at the same university. At the beginning of my doctoral studies I was awarded a Smithsonian Predoctoral Fellowship, and off I went to the Harvard–Smithsonian Center for Astrophysics, in Cambridge Massachusetts, USA to carry out my research for the next five years. It was an extremely rewarding experience, both on a professional and personal level! I finished my PhD in the fall of 2008 and moved to Garching for an ESO Fellowship.

My research is primarily based on observational studies of low- and intermediatemass star formation. I began working on ESO NTT near-infrared imaging data during my MSc, and progressively have been shifting to longer and longer wavelengths: during my PhD I analysed mid-infrared Spitzer data and ended up venturing into the (sub)millimetre realm with the Sub-Millimeter Array (SMA). I am interested in many aspects of star formation, namely. the collapse and fragmentation of filamentary molecular clouds, proto-binaries, the characterisation of young star-forming clusters, and the evolution of circumstellar discs and planet formation. I approach these topics from a multi-wavelength perspective.

ESO offers a wide spectrum of opportunities for me to expand my knowledge and horizons. Regarding my functional duties, I am involved with the second generation VLTI PRIMA instrument and

am part of the VISTA Science Verification Team. I am also co-organising a weekly meeting, the Informal Discussion, which has allowed me to interact with many visiting astronomers and learn about multiple aspects of the science being pursued at ESO and/or using ESO telescopes.

The future of astronomy is very promising, with ALMA coming online soon and the development of ESO's E-ELT. I am very fortunate to be able to pursue my childhood dream and hope to continue on this journey. One of my specific goals is to use these upcoming cuttingedge facilities, combining a multi-wavelength approach with stunning angular resolution!



Paula Stella Teixeira

Announcement of the ESO Workshop

## Spiral Structure in the Milky Way: Confronting Observations and Theory

7-10 November 2010, Bahía Inglesa, Copiapó, Chile

Our knowledge of spiral arms in the Milky Way and the kinematics in the Solar Neighbourhood has increased significantly over the last few decades. Despite these advances, there is still no consensus on basic parameters of the spiral structure in our Galaxy, such as the number of major spiral arms and their location, the pattern speed(s) and amplitude, and the relation of the arms to the central bar. Major new facilities (e.g., ALMA, GAIA, LSST, VISTA and VST) will provide a wealth of data on the spatial and kinematic distributions of material in the Galaxy. Thus, it seems appropriate to perform a census of the current data for confrontation with theory and models of spiral structure, and thereby map out a path towards a consolidated view of the spiral pattern in the Milky Way.

The workshop will bring together observers and theoreticians, and thereby fa-

cilitate an in-depth discussion of the spiral structure in the Milky Way.

The main topics will be:

- Tracers of spiral arms in the Milky Way at any wavelength
- Kinematic indicators of the spiral pattern in our Galaxy
- Models and theory related to the Milky Way spiral structure
- Estimates of parameters for the spiral pattern in our Galaxy

Scientific Organising Committee: Yuri Beletski (ESO), Leonardo Bronfman (Universidad de Chile), Giovanni Carraro (ESO), Ortwin Gehrard (Max-Planck-Institut für extraterrestrische Physik), Preben Grosbøl (ESO), Vladimir Korchagin (South Russia Federal University), Jorge May (Universidad de Chile), Naomi McClure-Griffiths (Australia Telescope National Facility), Lars-Åke Nyman (ALMA), Delphine Russeil (Observatoire de Marseille).

The workshop is planned for 3.5 days with four sessions for each of the full days. The first three sessions will contain long reviews (40 + 5 m) and some contributed talks (15 + 5 m). The last session of each afternoon will be devoted to discussions plus short summaries of selected posters. We aim for around 50 participants with a maximum of 70 as allowed by local facilities. Proposals for both contributed talks and posters are invited. Students are particularly encouraged to apply.

Further details are available at http://www.eso.org/sci/meetings/MW2010/.

The deadline for registration is 6 June 2010.