

stars community, which provided additional motivation. After graduating in 2009, I started a project to study hot subdwarf binaries that emerged from my PhD thesis and spent another three years in Bamberg as a postdoc. During all those years I had the opportunity to travel quite a lot for observations and to attend conferences all around the world. Furthermore, I could also finish my dissertation in history, which provided a nice contrast to my daily life as astronomer.

The focus of my research lies on spectroscopic analyses of hot subdwarf stars, which we explain as the bare helium cores of red giants, which have lost almost their entire envelope. The mechanisms by which the envelope is lost are still not well understood. Hot subdwarfs are formed only under special, and often extreme, conditions. Interactions with stellar or planetary companions are considered, as well as stellar mergers. As potential supernova Ia progenitors they are relevant for cosmology and as possible remnants of star-planet mergers they

might provide insight into the role of planets for stellar evolution. I like the diversity of those objects and their relevance for totally different fields of astronomy.

I appreciated working with very skilled and nice colleagues who shared my enthusiasm for those small stars. What I like most in doing astronomy is the personal freedom to direct my own research. Although times are also changing here, astronomy still remains a field where one guy can sometimes make a difference. Discovering new things and thinking about possible implications is the best part of research for me.

I was very happy when I got the ESO Fellowship, although I didn't really know what to expect. Coming from a small place I was a little bit worried how I would fit into this crowd of pre-selected students and fellows from all around the globe. However, my worries turned out to be totally unjustified and I really like the nice and active people and the open atmosphere at ESO very much. Being an

almost local boy is actually quite an exotic thing among the other Fellows. I try to explain and represent my region as well as I can and to educate others about the true quality of beers in Munich.

ESO is like a big window into the great wide world of astronomy, which is especially useful for people coming from smaller institutions. It is also a perfect spot for interactions with other astronomers from the ESO staff, the numerous visitors or through my functional work, which I perform in the Archive Science Group, where I take care of the content validation of the ESO Public Surveys. Another thing I am very thankful for is that ESO gives me the opportunity to fulfill my teaching duties at the University of Erlangen, which are a necessary prerequisite for my Habilitation, which I am planning to conclude next year. While I am already applying for the next jobs, I will definitely enjoy my remaining year as an ESO Fellow.

External Fellows at ESO

In addition to the ESO Fellowships, a number of external fellows are hosted at ESO. A profile of one of the current Marie Curie Fellows is presented.

Izaskun Jiménez-Serra

I must have been around 12 years old when I first told my parents that I wanted to be an astronomer. The idea probably formed in my head during my childhood. I was a privileged child. My father is a teacher of philosophy (his specialty is the philosophy of science) and he encouraged my interest in physics and mathematics. My mother is a researcher in biology so, in a sense, I grew up in an environment where science was present

in family life. During the hot summer nights in the countryside of central Spain, my father used to tell us about the theories of the origin of the Universe, which captivated me.

By the time I finished secondary school, I already knew what I wanted to do in life. I chose a physics degree and I specialised in astrophysics at the Spanish Universidad Complutense in Madrid. An opportunity to do a PhD in star formation at the Spanish National Research Council (CSIC is its acronym in Spanish) came up and I did not think twice about accepting. My work was mainly observational in the physical processes and chemistry of supersonic shock waves in star-forming regions. The Atacama Large Millimeter/

submillimeter Array (ALMA) was still several years in the future, but my work focussed mostly on the millimetre/submillimetre regime to become a future user of this amazing facility. Those were great years. I not only learned a lot about radio astronomy and star formation, but I also had many enjoyable moments with some of my best friends.

After my PhD, in 2007 I moved to the UK where I took up a postdoctoral position at the University of Leeds. I carried out some theoretical work in the destruction processes of interstellar dust in shock waves to explain some of the observations obtained during my PhD. This position allowed me to learn more about the chemistry in the interstellar medium at



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very cold temperatures (and by “very cold” I mean 10 degrees above absolute zero!), which appears in very young solar-

type systems. This has become one of my main interests in recent years.

As the next step, I was awarded a Submillimeter Array (SMA) Fellowship to work with the SMA team at the Harvard–Smithsonian Center for Astrophysics (CfA). This position meant I could achieve professional maturity as a researcher. Those were very intense (but exciting!) years where I had the opportunity to operate the SMA, a pioneering instrument for ALMA. This was the first time I was in direct contact with the operational work at a telescope. I had to travel often to Hawaii which was great fun. I will always be very grateful to the SMA and its team who taught me so much!

In early 2013, I came back to Europe, thanks to a Marie Curie Fellowship hosted by ESO (thank you FP7!). This year and a half at ESO has been really exciting. I not only have participated in some of the functional work of the ALMA

Regional Centre at ESO, but I have helped in designing science cases for the future development of this extraordinary facility. The atmosphere at ESO is stimulating: there are always many visitors, meetings and conferences around, and its location on the Garching campus allows interactions with researchers from other institutes. At ESO, I have recently started a project to try to detect the building blocks of life, amino acids, in very young solar systems. It may sound like science fiction to many but the truth is that, thanks to ALMA, we are getting close to reach the limits where these complex organics may be detectable!

As for the future, in six months I will be taking a tenure-track fellowship (an Ernest Rutherford Fellowship) at University College London in the UK. This is really exciting since this will allow me to build up my own group and to continue exploring the pre-biotic chemical complexity in young solar systems.

Announcement of the ESO Workshop

ESO in the 2020s

19–23 January 2015, ESO Headquarters, Garching, Germany

This workshop will provide a forum for discussion of the likely astronomical landscape in the 2020s — both core science and burning topics, in so far as these can ever be predicted. Flowing from that, the community is invited to advise the ESO Executive with regard to future facilities, including, but not limited to, those at the optical/infrared observatories at La Silla and Paranal in Chile, at the submillimetre observatories APEX and ALMA on Chajnantor and the European Extremely Large Telescope to be constructed on Armazones.

In addition to high-level summaries there will be ample time for discussion and the presentation of new ideas to shape the future of ESO.



For more information please visit the workshop webpage at:
<http://www.eso.org/sci/meetings/2015/eso-2020.html>
or contact eso2020@eso.org