

Thirty Meter Telescope (TMT) Project Office in Pasadena, California. I worked on a number of tasks, including the design and planning of the telescope enclosure and structure, project assistance to the TMT–Japan project offices, the investigation and planning of the on-site construction phase and the detailed long-term operations planning for the observatory.

Now back at ESO once again as the Project Engineer for the European Extremely Large Telescope (E-ELT) project, I'm using these accumulated experiences of the

last 20–30 years of my working life in big projects and astronomical organisations to help ESO deliver the largest and most technologically advanced telescope so far.

In between times, those who know me, know that I'm seldom idle outside of work on weekends.

Over the years, whatever the remote location of the observatory, I'm always out and about, whether it be paragliding in Tucson, mountain biking at Paranal, windsurfing in Antofagasta, or kiteboarding in La Serena and Hawaii. Road

cycling is my current passion, which is how I met my wife, Leslie. Although Californian, Leslie has actually spent most of her life in northern Montana as a cowgirl, backcountry horse riding, skiing, hiking and road cycling. Leslie and I now have a combined “stable” of twelve bicycles, including several beloved Pinarellos. As well as sharing her passion for road bikes, Leslie shares with me our grown-up son Hunter, a young entrepreneur living back in Pasadena, whom we proudly boast is a successful small-business owner employing several people and helping to kick start the US economy.

Fellows at ESO

Noé Kains

Looking back, my path to becoming an astronomer is perhaps a slightly unconventional one. Like most other astronomers, I have early memories of being interested in space and rockets. I also remember being entranced by the night sky during summer family holidays — I was lucky to spend entire summers sailing around the North Sea, and I particularly enjoyed sailing at night, which gave me plenty of opportunities to get away from light pollution and see the night sky in all its glory.

I was born and raised in Brussels, and moved to London when I was 17 to begin an undergraduate degree in physics at Imperial College, because I enjoyed physics and maths at school, but also because I had decided very early on that I wanted to go and see other things than the small country in which I grew up. Apart from my long-standing obsession with London, there was another reason that I wanted to move to the UK in particular. Since the age of six, I had been studying the piano and I knew that the more flexible education system in the UK would allow me to pursue both interests. During

my undergraduate physics degree, I was lucky enough to be supported by scholarships that enabled me to continue my musical education in parallel; something that would have been very difficult in Belgium. After working on an astronomy project for my Master's thesis, I decided to apply for a PhD in astrophysics, which I started at the University of St Andrews in Scotland in 2006. Again, throughout my PhD I kept up a busy musical parallel life, which I think made the PhD experience much easier. I was lucky to have a supervisor who fully supported this, even when I disappeared for weeks at a time on concert tours! During almost four years in Scotland, my love for astronomy developed further and the fun I had working on my PhD convinced me that this was the career I wanted to pursue.

My first observing trip, in 2007, was a 23-night run on the 1.54-metre Danish telescope at La Silla. If 23 long winter nights did not dent my fascination for observing, clearly my commitment to this was no fluke! Every day I was amazed to wake up in this strange place in the middle of nowhere, and every night I spent hours marvelling at the splendour



Noé Kains

of the Chilean night sky, running outside between two exposures of the Galactic Bulge to look at the bright trail of the Milky Way and the Magellanic Clouds. Two (thankfully slightly shorter) further observing runs in La Silla only strengthened my attachment to the place, so ESO was a natural place for me to consider

when it came to looking for my first post-doctoral position.

Working at ESO is such a privilege — to be surrounded by the people who run the world's most important observatory, particularly seeing the engineering and political sides of it, which is something that most scientists easily forget. The sheer number of talks, seminars and colloquia is a testament to this. Most astronomers come through ESO at some point or another, which means that, being here, we get to hear and meet many of today's brightest astronomers. During my Fellowship I have continued my work on exoplanet hunting using gravitational microlensing, and have started new collaborations, leading me to apply my work to areas of astronomy that I would not necessarily have considered before. There is definitely a sense of being lucky to be here at ESO and wanting to make the most of it amongst the community of young researchers. Of course, being an astronomer is a privilege in general: we are essentially employed to think, and get to visit many of the world's most incredible places for observing trips, conferences or collaborations. Another advantage of being here is that ESO is in the news a lot. It may seem trivial, but it is a nice feeling when your family and friends have a vague idea of what you do as an astronomer, thanks to the amount of media exposure ESO receives as a world-leading observatory.

On the music side — well, of course I don't spend as much time practicing the piano or performing as I once did, but the first "piece of furniture" I bought when I moved to Munich was a piano — before even buying a bed! I still find that the balance in my life between music and my "job" is essential. When struggling with a science problem I can come home, practice for a few hours and "reorganise" my brain. It really works!

After two great years at ESO, it's unfortunately already time to start looking for my next job. Wherever I go, I know that the experience and contacts I am gaining here will be a major asset, both on a personal and professional level.



Roberto Galván-Madrid

Roberto Galván-Madrid

Looking at it in retrospect, I don't know how I got here, but I'm very happy that it came to be. I was born in the southeast of Mexico, in the "small" city (with about a hundred thousand inhabitants) of Chetumal, in the Yucatan Peninsula. People there just do not become scientists. The natural path within my extended family would have been to become a merchant, a bureaucrat, or a politician. Luckily, my parents always motivated my brothers and me to educate ourselves, perhaps because they didn't have the chance to finish professional degrees, and there were many lectures at home on which to spend some afternoons after school. I remember my excitement when I was a kid and discovered some books that explained things about particle physics, space travel or the Solar System.

When I finished high school in 2000 I convinced my parents that "I had to leave" my home town to study physics. Then I moved to Monterrey to start my college degree, a completely different, accelerated, heavily industrialised city of four million people in the north of Mexico. I remember those years as a period of discovery where I dived into so much knowledge, made some of my best friends in life, and realised that making contributions to science was within reach. Five years later, after discarding the idea of postgraduate studies in some other areas of physics, or taking a second degree in

philosophy — good decision! — I started my masters in astronomy at the Center for Radioastronomy and Astrophysics of the National University of Mexico (UNAM). There I learned a lot from my advisor Luis F. Rodríguez and several other staff members. In 2007, I was lucky enough to be admitted to the predoctoral programme of the Smithsonian Institution, and moved to the Center for Astrophysics in Cambridge, Massachusetts, to conduct my doctoral research working with the Submillimeter Array (SMA) group. Those years in "the geekiest town on Earth", with all their ups and downs, have a very special place in my memory. Toward the end of my thesis, I also spent a dreamy season in Taipei, Taiwan, eating yummy Chinese food.

In September 2011 I moved to Munich and started my ESO Fellowship. I wanted to learn about the European way of doing things and gain expertise with ALMA, and what better place than at the flagship astronomical institution on this continent. So far I am loving both the scientific opportunities and life in Germany, including beer fests and trying to learn to pile up words as locals do. I envision myself in the future going back to Mexico and helping a little bit to the development of my country — but one never knows! — while at the same time strengthening ties with all the great institutions in which I have worked all over the world. Owning a dog and publishing some fiction are also in my plans.