

ing with ground-based data. I have always been at the ‘top of the data food chain’, where I was working on a science-ready product. I strongly believe that being familiar with different types of data (be it ground- or space-based) is necessary to become a true modern astronomer. I was always fascinated by peeking behind

the scenes of the observatory’s work and seeing what challenges the crew faces on a nightly basis. This was my main motivation to apply for an ESO fellowship in Chile. As a second-year fellow, I still think I have only seen the tip of the iceberg of what the observatory’s work is. At the same time I must honestly admit

that ever since have I joined ESO, every day I go to sleep more knowledgeable than when I woke up. I am both amazed and humbled by having the chance to work with people here, who every day dedicate themselves to creating the smoothly operating organism that Paranal Observatory truly is!

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## External Fellows at ESO

In addition to the ESO fellowships, a number of external fellows are hosted at ESO.

### Maria Kalliopi Koutoulaki

Born in the Greek island of Crete, a place that is not affected much by light pollution, I remember always being fascinated by the night sky. Being raised in a family working at the archaeological Museum of Heraklion, I would spend my summers at excavation sites learning about the Minoan civilisation. We would go to isolated places without electricity and although in the beginning I was interested in becoming a tomb archaeologist I was unable to resist the night sky above me. I remember looking at the Moon with my first telescope. I was mesmerised by the details I could see and it made me wonder what else could be out there.

Following my passion as a child, I decided to pursue a degree in physics at the University of Crete. I was motivated to learn more about astronomy, so I joined the astronomy club at the university, where we would have discussions about astronomy, do outreach activities to engage the public in astronomy, and of course go every week into the mountains of Crete with our telescopes to explore the night sky. As part of my undergraduate thesis, I had the opportunity to work on the characterisation of interacting galaxies using optical spectroscopy and near-



infrared imaging under the supervision of Andreas Zezas. I had the unique experience of taking my own data from Skinakas Observatory where I learned to operate a professional telescope. This, along with a summer I spent at the University of Texas at Austin, made me realise how wonderful it is to work as part of a research group. Being able to exchange ideas, trying to understand what our results meant, along with finding new ways to answer them convinced me

that I wanted to continue working in such an environment.

In order to gain more experience, I decided to take my research to the next level by moving to Dublin for my PhD. I got a scholarship at the Dublin Institute for Advanced Studies (DIAS) and the University College Dublin (UCD) to conduct research under the supervision of Tom Ray, Rebeca Garcia Lopez, Antonella Natta, and Deirde Coffey. During my PhD,

I focused on the inner regions of protoplanetary discs using near-infrared interferometry. I focused on understanding the physical properties at sub-au scales using the hydrogen Brackett-gamma line and the molecular CO ro-vibrational emission at 2.3 microns using the Very Large Telescope Interferometer with the Astronomical Multi-BEam CombineR (AMBER) and GRAVITY in the *K* band. Being part of the GRAVITY GTO consortium, I had the unique experience of spending many nights at Paranal Observatory and be trained in how to conduct observations with GRAVITY. I will never forget gathering with the staff and other visitor astronomers to watch the sunset and wait for the green light to appear.

Needless to say, the night sky in the Atacama Desert is one of the most beautiful I have ever seen. During my time at the observatory, I could appreciate how much manpower and organisation is needed for an observatory to run smoothly and deliver the data to the astronomical community, which made me realise that I wanted to be part of it.

After defending my PhD at the end of 2019, I moved to ESO in Garching to start a position funded by the DFG (German Research Foundation) grant “Planet Formation Witnesses and Probes: Transition Disks” led by Leonardo Testi. I am currently working on understanding the dust properties of the discs around young

protostars using the Atacama Large Millimeter/submillimeter Array (ALMA). I am extremely grateful to be part of ESO. It is a very vibrant place, where interactions can be established with many different universities and institutes, as well as researchers visiting from all over the world. By being there I have learned a lot about operations and the observatory; knowledge that I wouldn’t have had if I had gone somewhere else. In my free time, I take every opportunity to relax by hiking in the mountains around Munich, visiting the lakes, and exploring the city and its culture. I also enjoy baking, practicing Taekwondo and doing yoga.

## Personnel Movements

### Arrivals (1 April 2020–30 June 2021)

#### Europe

|                        |  |
|------------------------|--|
| Scherbarth, Malte (DE) | Mechanical Technician                      |
| Popesso, Paola (IT)    | User Support Astronomer                    |
| Lammen, Yannick (DE)   | Mechanical Engineer                        |
| Hofmann, Anja (DE)     | ELT DMS Deputy Project Manager             |
| Seal, Madeleine (FR)   | Council Secretary/Administrative Assistant |

#### Chile

|                               |                                     |
|-------------------------------|-------------------------------------|
| Racz, Gregory (CA)            | Head of Logistics                   |
| Caro, Patricio Alejandro (CL) | Electronics Engineer                |
| Ortega, Marcos (VE)           | Maintenance Engineer                |
| Fluxa, Pedro (CL)             | Data and Quality Control Specialist |
| Molina, Faviola (VE)          | Data and Quality Control Specialist |
| Fuentealba, Christian (CL)    | Facilities Technical Assistant      |

### Departures (1 April 2020–30 June 2021)

#### Europe

|                            |                     |
|----------------------------|---------------------|
| Downing, Mark Desmond (AU) | Electronic Engineer |
| Mancino, Sara (IT)         | Student             |
| Bittner, Adrian (DE)       | Student IMPRS       |

#### Chile

|                        |                                   |
|------------------------|-----------------------------------|
| Gilliotte, Alain (FR)  | ERP Support Specialist            |
| De Luca, Giuseppe (VE) | Hospitality Operations Supervisor |