

probably share some basic ingredients in their formation processes.

This workshop aims at bringing together a broad international audience in the combined field of galaxy nuclei, super-massive black holes and nuclear star clusters, to confront state-of-the art observations with cutting-edge models.

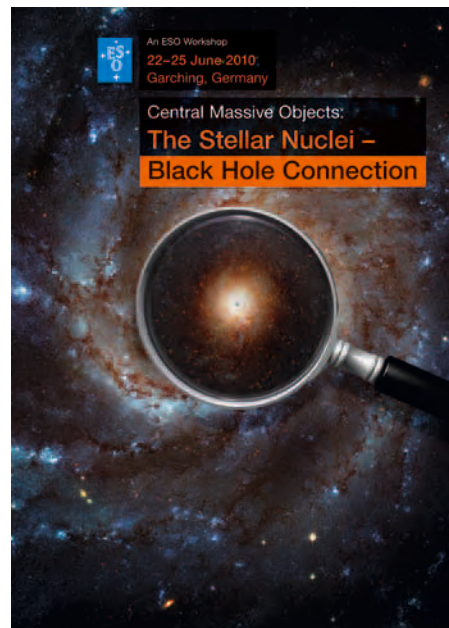
The key scientific questions for this workshop are:

- What is the evolutionary/causal connection between nuclear clusters and black holes?
- Are intermediate-mass black holes formed in nuclear clusters/globular clusters?
- Where do we stand observationally for black holes, nuclear clusters and intermediate-mass black holes?
- What can the Galactic Centre tell us about the nuclear cluster-black hole connection?
- How do the central massive objects relate to the host galaxies?

- What do theoretical models tell us about star formation in the extreme gravitational potential near the black hole and under the extreme stellar densities in galactic centres?
- What do theoretical models tell us about dynamics, evolution and migration of nuclear star clusters in galaxy centres?
- Do we understand the feeding of the central pc?
- How are nuclear clusters replenished with fresh gas?

The Scientific Organising Committee consists of: Eric Emsellem, Harald Kuntschner, Nadine Neumayer (all from ESO); Ralf Bender (LMU/MPE); Torsten Boeker (ESTEC); Elena Gallo (MIT); Reinhard Genzel (MPE); Ortwin Gerhard (MPE); Jenny Greene (Princeton); Simon Portegies Zwart (Leiden); Anil Seth (CfA); Roeland van der Marel (STScI) and Marta Volonteri (Michigan).

The registration deadline is 22 March 2010 and more details can be found at [www.eso.org/sci/meetings/cmo2010](http://www.eso.org/sci/meetings/cmo2010).



## New Staff at ESO

### Rüdiger Kneissl

Since January of this year I have been working for ESO as an astronomer in Science Operations on the ALMA project. At the moment, while we are building ALMA, I spend a good fraction of my time on commissioning. It is exciting to see the project evolving so rapidly, from testing the first accepted antennas at the ALMA Operations Support Facility to interferometry at the Array Operations Site at 5000 m, and to be able to contribute at every step. The planning for operations is going on, along with progress on the completion of the instrument. Now we are detailing the processes for the first call for proposals and for the early science operations, which will follow.

Before joining ESO and ALMA, I worked in different places. After receiving my theoretical PhD from the University of Munich and the Max-Planck Institute for Astrophysics, I moved to Cambridge, England. There I learned about radio interferometry thoroughly, mainly on projects to measure the fluctuations in the cosmic microwave background (CMB) and to observe galaxy clusters via the Sunyaev-Zel'dovich (SZ) effect, with instruments such as the Cosmic Anisotropy Telescope, the Very Small Array and the Arcminute Microkelvin Imager. I also became involved in the Planck project, where I am now a scientist and a member of the High Frequency Instrument core team. At the University of California, Berkeley, and the Max-Planck Institute for Radioastronomy in Bonn I



continued CMB studies with the SZ-camera we commissioned on the APEX telescope. Now on ALMA, in spite of the huge work load, I am still able to do

research in these projects, specifically aiming at combining observations in a useful way, for example monitoring Planck sources with APEX, which could be important ALMA calibrators. When ALMA becomes operational, I will be most interested in observations of high redshift galaxies and higher resolution imaging of SZ galaxy clusters, which I am currently modelling.

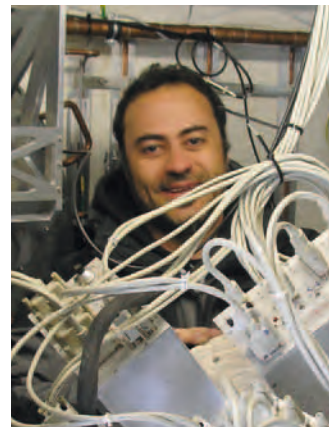
Coming to Chile was not an easy step, even without a family. My decision was driven mainly by work considerations, but living here, I am truly enjoying the welcoming and friendly culture of South America and the opportunity to travel around this spectacular region with its amazing landscapes.

### Giorgio Siringo

My father was a school teacher, he taught mathematics and physics at a high school in Siracusa, in the very south of Sicily, where I grew up. He was really good at explaining everyday physics phenomena with simple words. My sister, my brother and I were fascinated by his tales revealing the magic of our Mother Nature, often embellished with anecdotes (mostly the fruits of his imagination, I presume) about Archimedes, Euclid or Fermi and Einstein (the last two were still alive when he was a student). He definitely had a strong “imprinting” effect: today my brother is a university professor of theoretical physics, my sister studied physics, but ended up teaching philosophy (which, in some senses, is not too far from physics) and I became an astrophysicist. I grew up during the Cold War, which, besides being a social threat, had the merit of providing an incredible boost to astronautics and technology development in general, making amazing projects like the manned missions to the Moon, the *Voyager* probes flying by Jupiter and Saturn, the MIR space station and the Space Shuttle possible. The popularity of those space missions and their great impact on the media (I’ll never forget the emotions associated with the first marvellous false-colour pictures of Jupiter) attracted my attention even more to physics and astronomy and to the technology development that is necessary for their study.

I started my study of physics at the University of Catania, where I also studied astronomy at the local Institute of Astronomy, attached to the Observatory of the Italian National Research Council, at 1750 m on Mt. Etna. The limited number of university courses available in Catania pushed me to move to the (much larger) University of Rome “La Sapienza” where I joined the Experimental Cosmology Group G31. I was involved in ambitious projects aimed at measuring anisotropies and polarisation of the Cosmic Background Radiation (CBR) at millimetre wavelengths. During those years I studied cosmology and astrophysics, but I also learned how to build and operate a cryostat, to acquire and reduce data from 300-mK bolometers, or to measure the spectral transmission of a filter using a Fast Fourier Transform (FFT) interferometer. My university thesis is about a polarimeter using bolometers for ground-based measurement of the CBR polarisation to be operated at the MITO observatory, a 2.6-metre millimetre telescope at 3500 m in the Swiss-Italian Alps. We never measured any CBR polarisation, but it was an exciting experiment and my first experience of working on top of a high mountain, trying to concentrate while suffering from lack of oxygen. At that time I couldn’t envisage that it was going to be my recurrent working condition.

I did my PhD at the University of Bonn, in Germany, where I worked for nine years in the bolometer group of the Max-Planck Institute for Radio Astronomy (MPIfR). My PhD thesis (here someone could argue that I have a limited imagination) is about a polarimeter for use with bolometers. This project, quite different from the one in Rome, was aimed at the observation of closer and brighter targets than the cosmic microwave background, such as Galactic molecular clouds, and designed as a sort of “polarisation plug-in” giving polarisation-sensing capabilities to the bolometer arrays produced by our group in Bonn. The polarimeter was successfully operated in combination with a bolometer array for the 870-micron atmospheric window on the Heinrich Hertz Telescope (HHT, also known as the Sub-Millimetre Telescope Observatory, SMTO), a 10-metre telescope, located at 3200 m on Mt. Graham in Arizona.



In May 2004 I went to APEX for the first time, working on the first-light instrument and for the first radio pointing model. It was the beginning of a very long series of trips to the 5000 m high plateau of Chajnantor as an MPIfR post-doc. In the following years I worked on the development, installation and commissioning of LABOCA and SABOCA, the facility bolometer cameras of APEX.

This year I had the great opportunity to join ESO as a staff astronomer at APEX. I live in Santiago and finally I don’t have to fly from one hemisphere to the other to observe with the bolometer cameras that I installed there.

My father dreamt of being an astronomer: he studied physics, but when he finished at university, immediately after the Second World War, he had other priorities and decided to be a school teacher and a good father. I think he likes the idea that one of his sons works as astronomer, somehow making his dream come true.