

The Lorentz Center

The Lorentz Center in Leiden is an international centre that coordinates and hosts high-visibility workshops in the sciences, in particular physics, astronomy, mathematics, computer science and the

life sciences. The focus is on new collaborations and interactions between scientists from different countries, fields, and levels of seniority. The Center offers substantial logistic as well as financial support for such workshops. Astronomers who are planning an international work-

shop or group meeting are invited to consider the Lorentz Center; more information can be found at www.lorentzcenter.nl.

Fellows at ESO



Lise Christensen

Growing up in a city, I never saw the Milky Way with my own eyes until the age of 16, and I could never identify more than two constellations. I was not at all certain that astronomy was the most interesting field of natural sciences that one could study until an observing trip to La Silla during my undergraduate studies finally convinced me.

After obtaining my Masters degree from the University of Copenhagen, where I studied images of the host galaxies of Gamma-ray bursts, I wanted to gain experience with spectroscopy. In 2002 the instrumentation division in the Potsdam Astrophysical Institute had recently commissioned a new integral-field unit (IFU) for the 3.5-m telescope at Calar Alto. Data from this instrument (PMAS) were to form the basis for my Ph.D. thesis, and it turned out to be quite a challenge to find the faint Lyman-alpha emitting galaxies that are responsible for strong absorption lines in the spectra of background quasars. After finishing my thesis in 2005, I immediately started as a fellow on Paranal, and having knowledge about

IFU data naturally led me to the position as a VIMOS instrument fellow.

My scientific interests are inclined towards galaxies in the high-redshift Universe. Instead of using traditional large surveys with flux-limited samples of galaxies, I have used other selection criteria in order to locate and study either the more common or unusual galaxies that existed in the early Universe. The experience with IFU data has allowed me to gain insight into different types of scientific projects that can be done with the same data sets, such as searching for field Lyman-alpha emitters or looking at quasar environments. Besides, working at ESO has given me the freedom and opportunity to work with several people on various projects that are outside my main scientific path.



Sune Toft

I did my Masters and Ph.D. studies at the Niels Bohr Institute, University of Copenhagen. During my first years of studying physics, I became very interested in

the philosophical aspects of physics, and discovered that astronomy, in particular cosmology, was a natural framework to pursue this interest. I was fascinated by cosmologist's attempts to develop a model for the entire Universe, despite the limited amount of observational constraints available at the time.

One of the best ways to constrain cosmology is to study the build-up of mass as a function of cosmic time. Observations of high-redshift galaxies provide the strongest constraints. For my Ph.D. thesis I used deep near-infrared (NIR) observations obtained with the VLT to study galaxy evolution in high-redshift clusters of galaxies. I spent seven months at the Institute of Astronomy in Hawaii, where I had the opportunity to observe with several of the big telescopes on Mauna Kea. I also had prolonged collaborative visits to ESO and Leiden.

In 2003 I received my Ph.D. and moved to the United States where I took up a postdoc position at Yale University. There I started working on a newly discovered population of NIR-selected massive, high-redshift galaxies. Working in the U.S. was very interesting, and I seriously considered staying for a second postdoc, but when in 2006 I had the opportunity to return to Europe for an ESO fellowship, I didn't hesitate. I have been very happy with this decision. ESO is a stimulating place to work, with lots of stuff going on (talks, workshops, etc). For my functional work I have become involved in the planning of the ELT, a project with great momentum which is exciting to be part of, and besides that I have plenty of time to pursue my own independent research programme.