Karen Pardos Olsen

Relevant skills

Data analysis	Strong, analytical mind
Programming	Advanced in: python, matlab, IDL
	Intermediate in: SQL, html
Writing	LaTeX, OpenOffice, Pages
Online platforms	GitHub, Wordpress, Dropbox
Operating Systems	Linux, Windows, Mac OS X

Work Experience

Post-doc in Multi-Energy Systems (from July 2018)

Department of Electrical Engineering (Elektro), Technical University of Denmark, Risœ, Denmark

- Simulate multi-energy systems, with focus on the integration of renewable energy.

- Work on international projects to increase flexibility in the European electricity grid.

Post-doctoral Fellow in Astronomy (Sep 2015 – June 2018)

School of Earth and Space Exploration (SESE), Arizona State University, Phoenix, AZ, USA

- Developed a novel program that simulates line emission from galaxies, resulting in three 1st author publications.

- Lead a successful proposal for a $200k NASA grant.

- Generated and managed memory-intensive jobs on supercomputers, e.g. at NASA.

- Organized bi-weekly python programming meetings for people in academia, with financial support from SESE.

- Administered several undergrad research projects.

Paid PhD student (Jan 2012 – May 2015)

Dark Cosmology Centre, Copenhagen, Denmark

- Analyzed X-ray data from a space telescope with the aim of characterizing galaxies, resulting in a 1st author publication.

- Participated in meetings and computational schools worlwide, achieving connections that led to a four month stay at the University of Arizona in 2013.

- Instructed three bachelor-level classes as teaching assistant.

Guide of scientific activities (July 2008 – Oct 2008)

Danfoss Universe Science Park, Nordborg, Denmark

- Motivated visitors of all ages to engage in the interactive scientific activities, by informing them of the physical background and history of each activity in English, Danish and German.

- Tested and performed technical repair of the installations in the park.

♡	Born: January 30 1986 (32 yrs)
©	Nationality: Danish and Spanish
⌂	1232 W 5th St, Tempe, AZ 85281
℻	+1 (480) 4793584
✉	kpolsen@protonmail.com
⌨	http://kpolsen.github.io/

Communication Skills

In writing	1st author on peer-reviewed papers
	wrote successful research proposals
Languages	Danish – native
	English – fluent in speaking and writing
	Spanish – fluent in speaking and writing
Outreach	For a list of talks and interviews see
	http://kpolsen.github.io/Talks/

Education

2015	Doctor of Philosophy in Astronomy
	Dark Cosmology Centre, Copenhagen University
2012	Master of Science in Physics
	Dark Cosmology Centre, Copenhagen University
2008	Bachelor of Science in Physics
	University of Aarhus

Volunteer Work

Feb 2016	Intern
	Earthship Biotecture, Taos, NM, US
July 2015	Volunteer kitchen assistant
	Ecofestival in Salvaterra, Portugal
Spring 2015	Manager of apple farm
	Kysøko apple farm, Kyse, Denmark
Aug 2012 – Sep 2015	Active member of local food coop
	KBHFF, Copenhagen, Denmark

Publications

- Olsen, K et al. 2017: SÍGAME simulations of the [CII], [OI] and [OIII] line emission from star forming galaxies at $z \sim 6$, Astrophysical Journal 846 2

- Olsen, K et al. 2016: CO in $z \sim 2$ normal star-forming galaxies, Monthly Notices of the Royal Astronomical Society 457 3

- Olsen, K et al. 2015: [CII] in $z \sim 2$ normal star-forming galaxies, Astrophysical Journal 814 76

- Olsen, K et al. 2013: Evidence for widespread active galactic nucleus activity among massive quiescent galaxies at $z \sim 2$, Astrophysical Journal 764 4