Observational Experience

Lizette Guzman-Ramirez

Optical Experience

- In 2008 observed in San Pedro Martir, as part of the MSc course, using the 84 cm Telescope.
- In the summer of 2009 used the 2.3m Telescope in Siding Spring, Australia. Observations made for the IPHAS follow-up project (PI Q. Parker).
- Also during the 2009 summer I observed at the 2.1m Telescope from Kitt Peak, Arizona. New set of observations from the IPHAS follow-up project (PI R. Corradi).
- In 2010 went observing to the 1.9m Telescope at the South African Astronomical Observatory. Again for the IPHAS follow-up project (PI A. Zijlstra).
- During the spring of 2011 I observed at the 2.3m Telescope in Siding Spring Observatory in Australia. Data for the IPHAS follow-up project (PI Q. Parker).
- Early 2012 Observing run at the 2.3m Telescope in Siding Spring Observatory in Australia. Analysing morphology and kinematics of PNe (PI Q. Parker).

Radio Interferometry Experience

- 2007 observed at the Very Large Array (VLA), data of the PN M2-43 to measure its angular expansion. We observed continuum (PI Y. Gomez).
- I analysed several observations from the VLA archive between 2007 and 2008, to measure the angular expansion of the planetary nebulae (PNe) IC 418 and NGC 6881. These data were also continuum.
- Data observed at the VLA. In this case we got spectral data for several PNe in 2009 (PI A. Zijlstra).

Infrared Experience

- 2009 obtained data form the Spitzer archive, to analyse the polycyclic aromatic hydrocarbons (PAH) bands in oxygen rich PNe.
- 2011 we got data observed with the Very Large Telescope (VLT) in Chile. We asked for images and spectra using the instrument VISIR for several PNe (PI. E. Lagadec).

Relevant experience

- A wealth of personal observing experience totalling just under 40 nights at a variety of international facilities, including the 2.3m ANU Telescope at Siding Spring, Australia, the 2.1m Telescope at Kitt Peak, Arizona, 1.9m Radcliffe Telescope at the South African Astronomical Observatory. Experience with a variety of observing techniques ranging from long-slit spectrographs that give us high spectral-resolution spectroscopy to WiFeS which is a double-beam, image-slicing, integral-field spectrograph.
- Extensive experience also in radio, IR and optical data reduction. I have experience analysing radio data from the *VLA* using AIPS and CASA. IR data from *Spitzer* using SMART and SPICE. And for the optical data reduction using IRAF.
- Good experience in organising committees for national and international conferences. Part of the Local Organising Committee for the Royal Astronomy Society National Astronomy Meeting at the University of Manchester, March 2012. And part of the Local Organising Committee for the International Meeting: Asymmetric Planetary nebulae 5. Held in the Lake District, July 2010.
- Wide outreach experience, almost every year since the beginning of my undergrad I have participated in Summer Science Fairs, with hands-on experiments and talks for general public. During my MSc I helped coordinate the Summer School at the Centre for Radioastronomy and Astrophysics, UNAM, Mexico. During my PhD in the UK I have been involved in several Science Fairs, Star Nights and the Royal Society Summer Science Exhibition. I'm also a member of "The Jodcast" an astronomy podcast at the Jodrell Bank Centre for Astrophysics at the University of Manchester.
- Good working knowledge of IDL, BASH, LATEX and unix-based operating systems.
- Fluent in Spanish and English languages.