

Technical/Observational experience

Observations

I have been observing on-site with the NOT at La Palma and three times with the NTT at La Silla on behalf of the NTT Large and PESSTO programs. In addition I was running the Stockholm remote TOO program at the NOT between 2009 and 2012, for which I also developed a series of observing script to further automate the procedure.

Data reductions

I have reduced the data for several large datasets, including those for SN 2011dh (Paper II and IV), 2009md (Fraser et al., 2011) and 2009kr (not published yet), as well as parts of the dataset for 2010jl (Fransson et al., 2014). These datasets spans both the optical and the NIR, includes both imaging and spectroscopy and also UV and MIR imaging obtained with SWIFT/UVOT and Spitzer. As part of this work I have also developed an IRAF based reduction pipeline as automation of the reduction procedure was necessary to effectively reduce such the large amounts of data.

Photometric calibration

In Paper II and IV much effort was spent to make sure the photometry, obtained with a large number of different telesopes/instrument, was well calibrated to the standard systems. In particular this required S-corrections (Stritzinger et al., 2002) to be determined for each telescope/instrument using the observed spectral sequence and the filter response functions (see Paper II).

Computer programming

As mentioned in the CV I'm a comptuter programmer by profession, which have been a great benefit during my PhD. I usually work in C or C++, but I am is also well acquainted with Python and Unix/Linux shell programming.

Modelling

During my PhD I have developed a Monte-Carlo atmosphere code (Paper II), aimed for spectral modelling and based on the method outlined in Mazalli & Lucy (1993), and the hydrodynamical code HYDE (Paper IV and VI), aimed for bolometric lightcurve modelling and based on the method outlined in Falk & Arnett (1977).