

Danish summer schools at the NOT



Science, instrumentation and education...

Motivation

- My personal motivation for studying astronomy initially had two main drivers:
 - 1) Getting to explore the deep cosmos, looking back billions of years to understand the formation of galaxies.
 - 2) To go to observatories and try to carry out actual observations.
- My main motivation for arranging observing schools was from the beginning to share the experience with others who had the same passion for trying to do this (This is the pathos part. There is also logos).
- I was hired in 2004 and the first school I organized was in 2007. Since then we have held schools every year (2020 and 2021 remotely due to COVID). Somewhere between 150 and 200 students have attended.
- First only KU students – later a national activity.

Structure

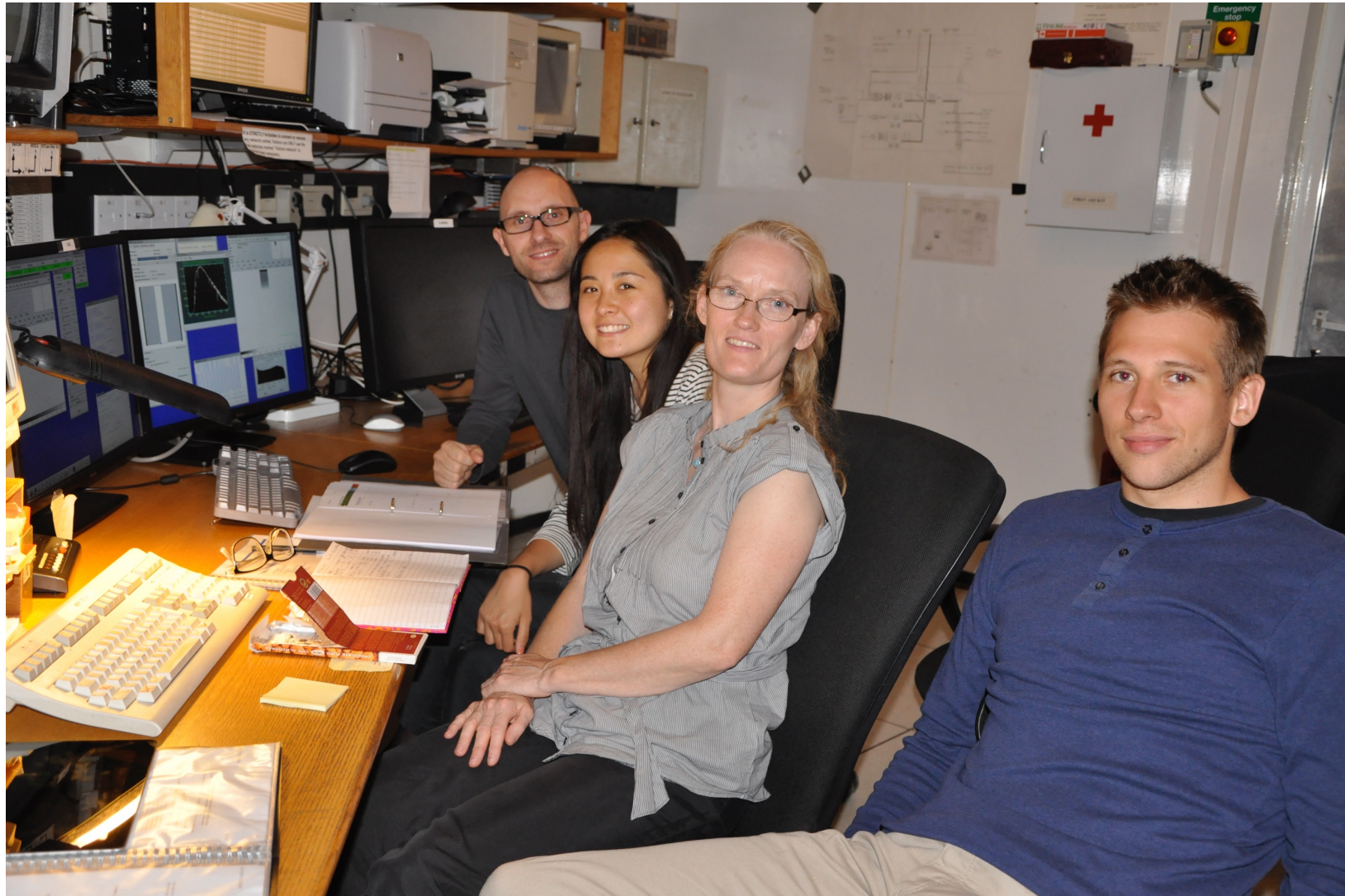
We try to go through all essential elements of an observing run (over roughly three weeks):

- 1) Idea
- 2) Preparation (Is it possible, which instruments, are there targets?)
- 3) More preparations (when, how long, calibrations, instrument setup).
- 4) Carrying out the observations.
- 5) Reducing and analysing data.
- 6) Present results in reports and talks.

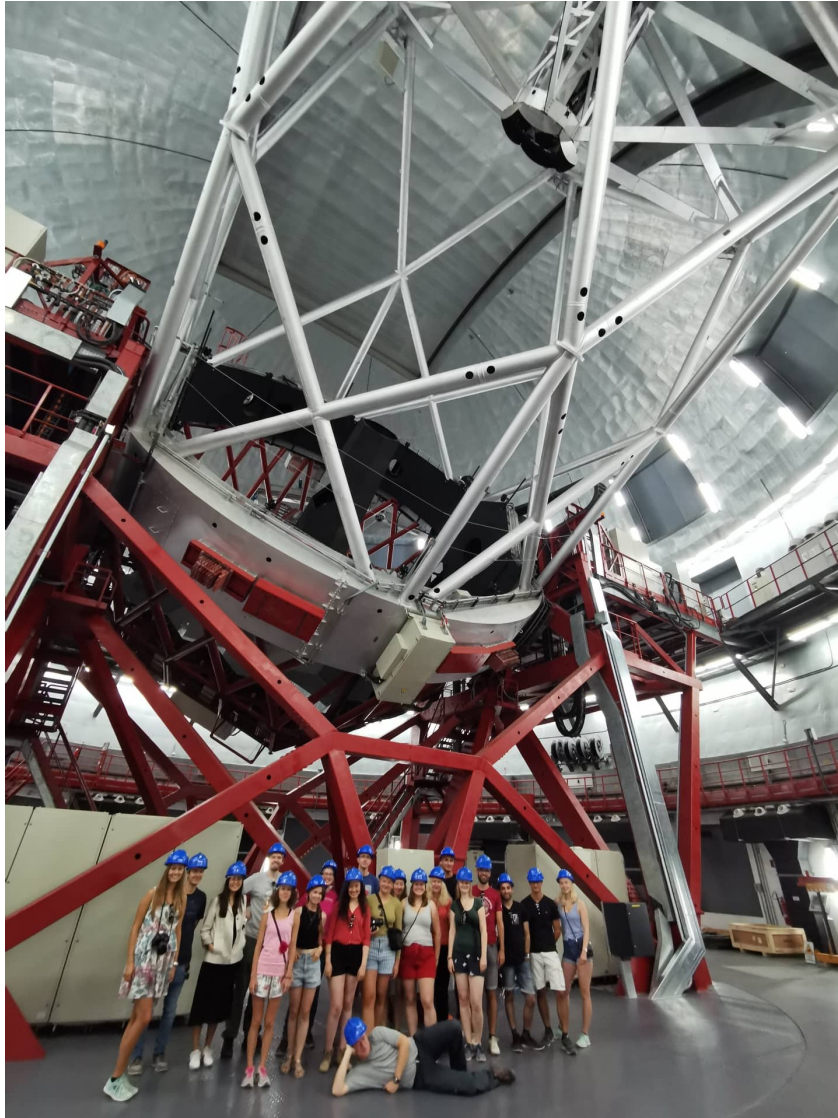
Impressions



Impressions



Impressions



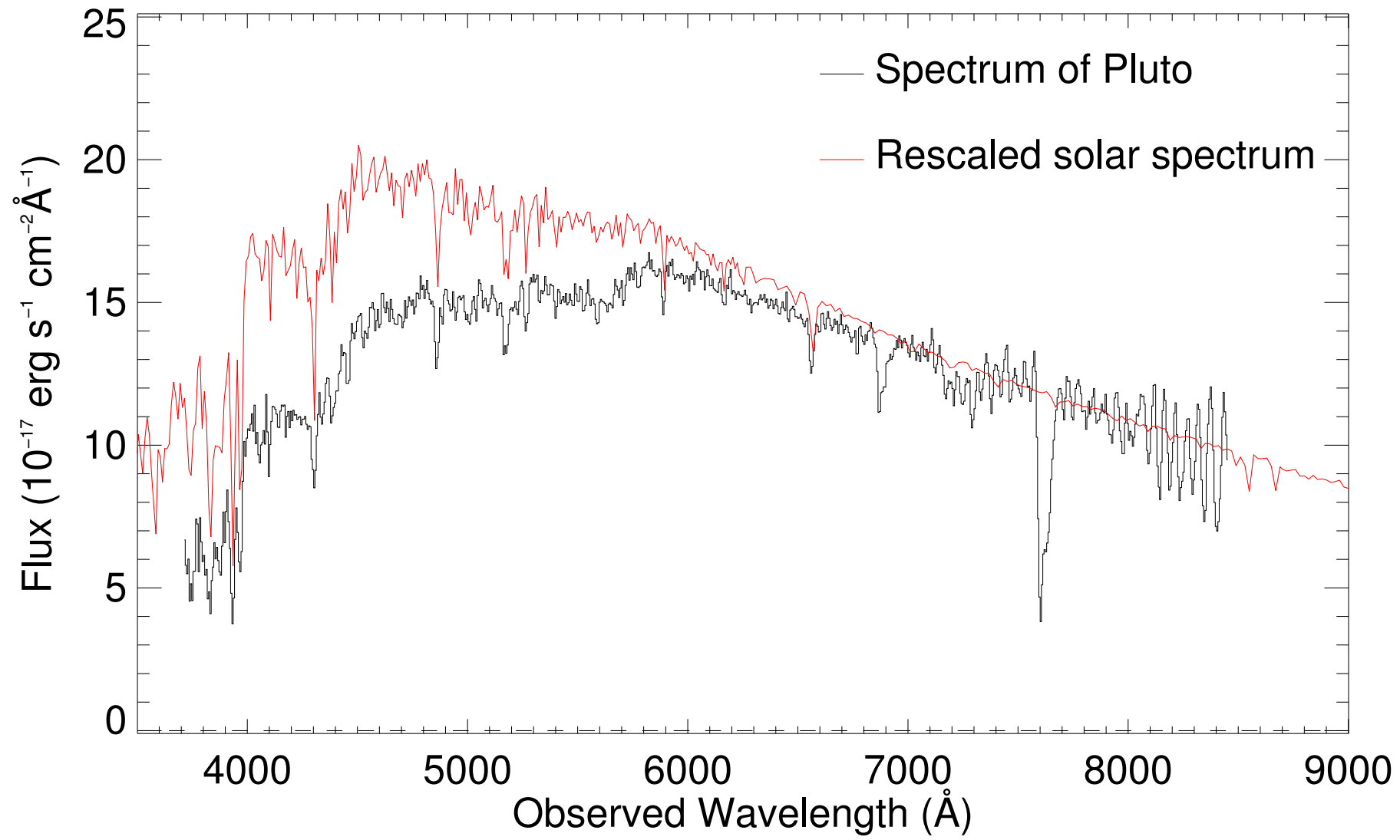
Impressions



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Summary and suggestions

- We have held summer schools since 2007. I see these schools as crucial for bringing new (keen) people into observational astrophysics. They are transformative for many of the students.
- It could be interesting to make a conference where the students accross contries could meet and compare results.
- We should make a library of data-sets that could be used for teaching, projects, etc. We have lots and lots and lots (SN, quasars, rotation curves, planet transits, etc., etc.).
- We could also share data reduction and analysis tools (see also PyReduc and PyNOT on github).