

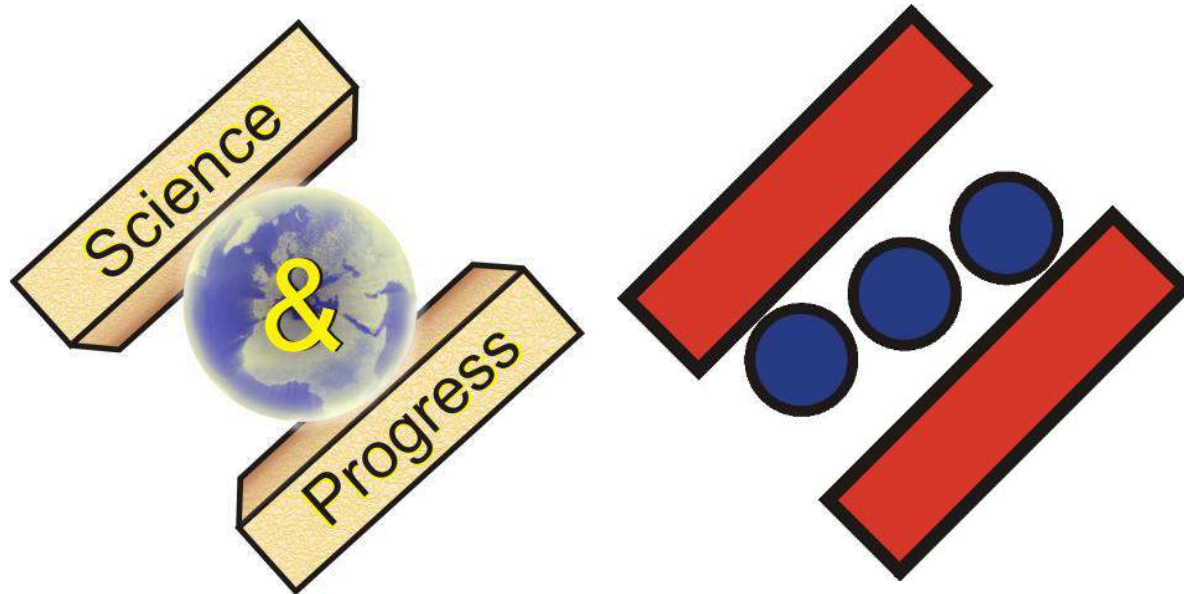


Leibniz-Institut für  
Astrophysik Potsdam

# Отчет о стажировке в Германию

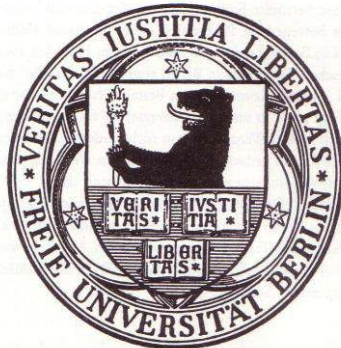
Ирина Смирнова–Пинчукова

# Как я попала на стажировку?



G-RISC

Немецко - Российский  
Междисциплинарный  
Научный центр



# DAAD

Deutscher Akademischer Austauschdienst  
German Academic Exchange Service

# План работы

1. Sum up all spectra within one effective radius.
2. Derive the velocity dispersion for the summed spectra.
3. Combine these new velocity dispersions with the existing catalog of black hole masses.
4. Determine the new and the old  $M_{bh}-\sigma$  relations to gauge the effect of correct velocity dispersion determination on the slope of the relation.

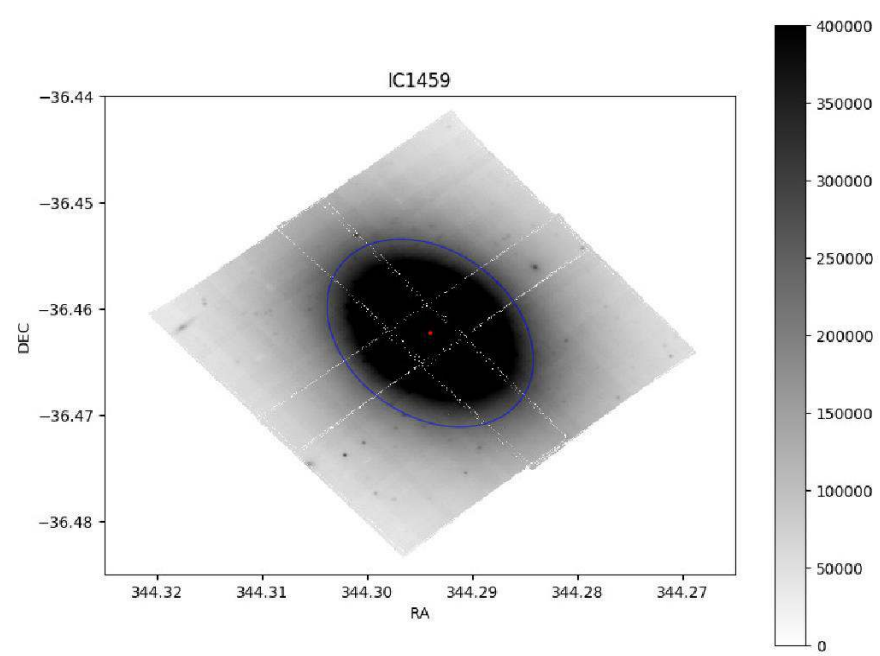
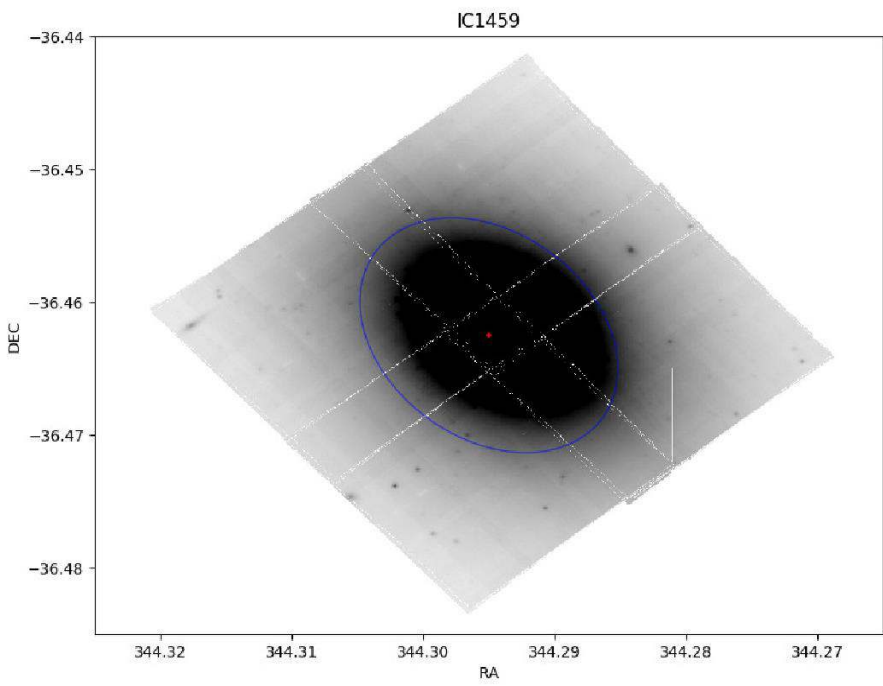
# Какие использовались данные?

- ▶ MUSE

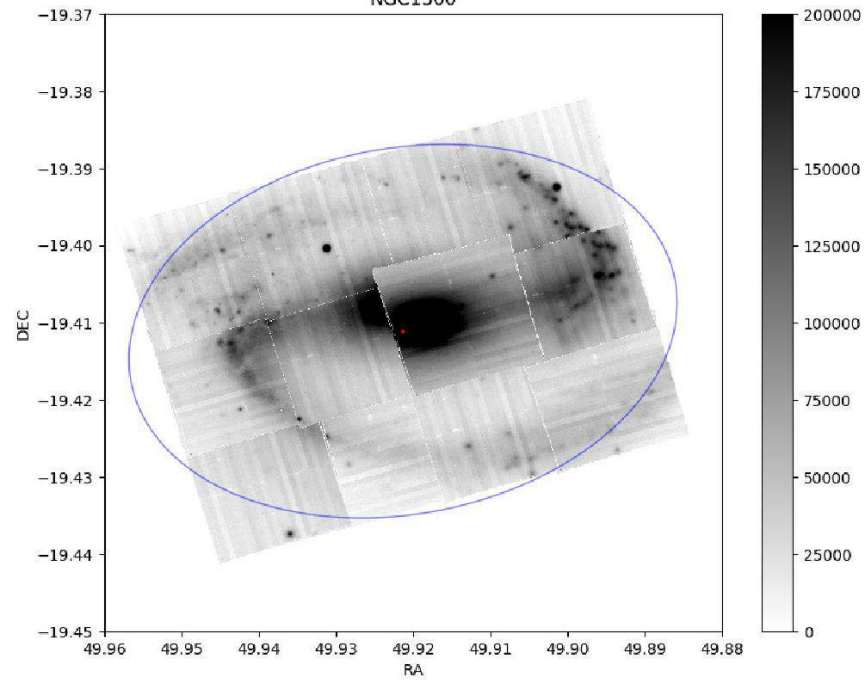


# Что было сделано

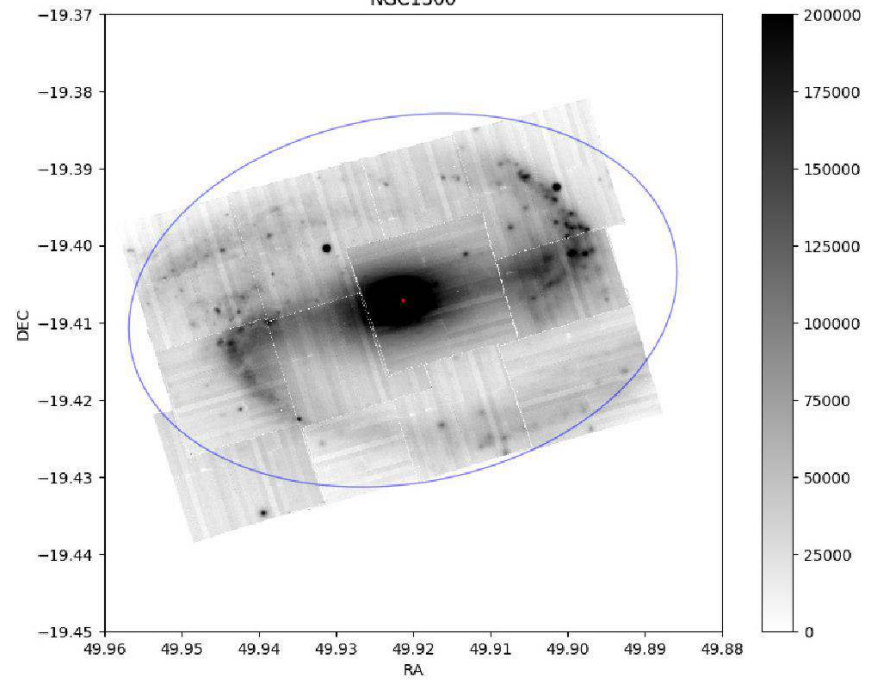
1. Plotting white-light images  
(`cubewhitelight.py` & `plotwhitelight.py`)
2. Astrometry correction  
(`astrometrycorrection.py`)
3. Correction of cubes overlap  
(`plotwhitelight.py`)
4. Summation (`cubesum.py` & `specsum.py`)
5. Obtaining the velocity dispersion  $\sigma$  by fitting stellar population model (PyParadise & ULySS)

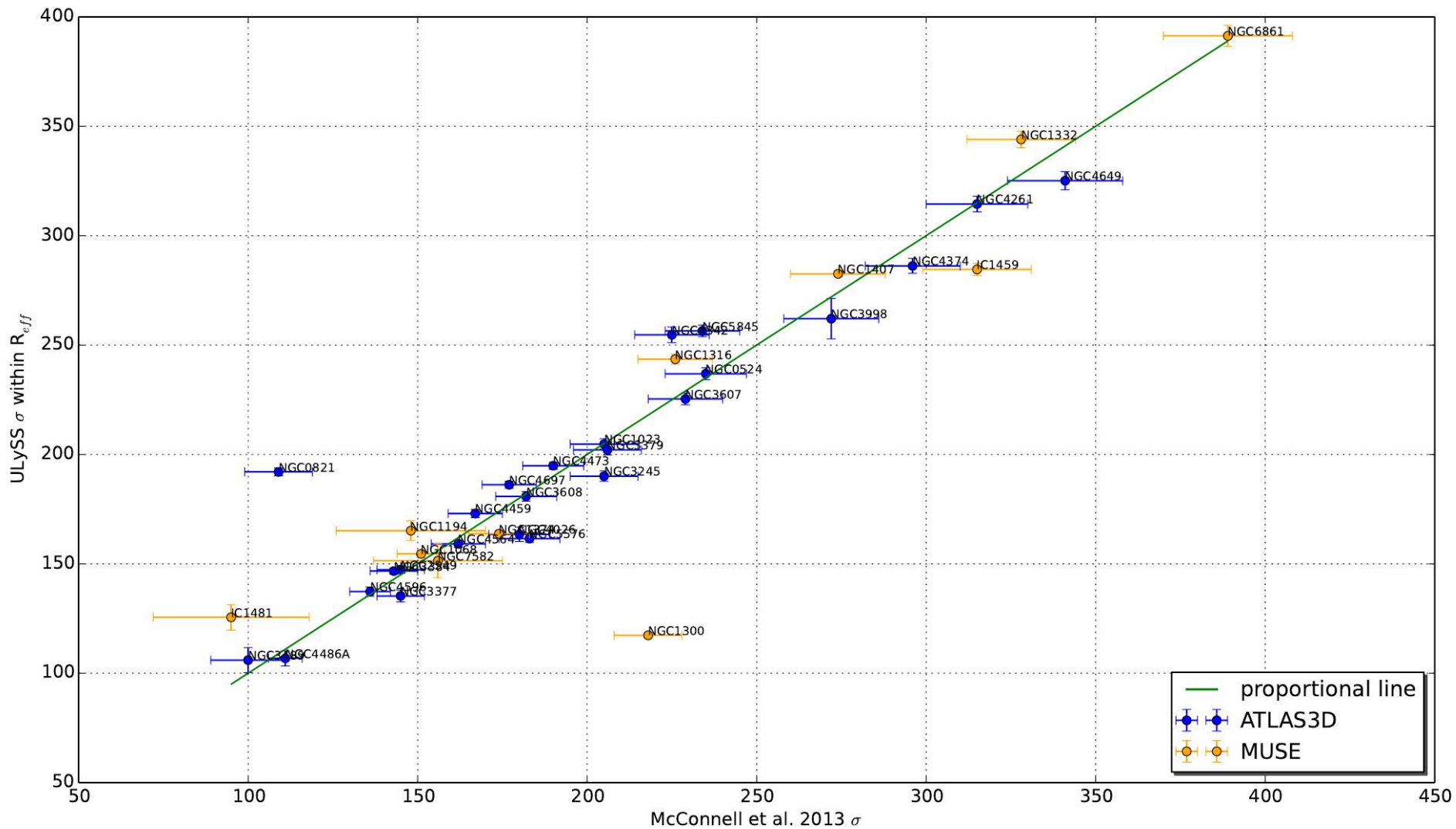


NGC1300

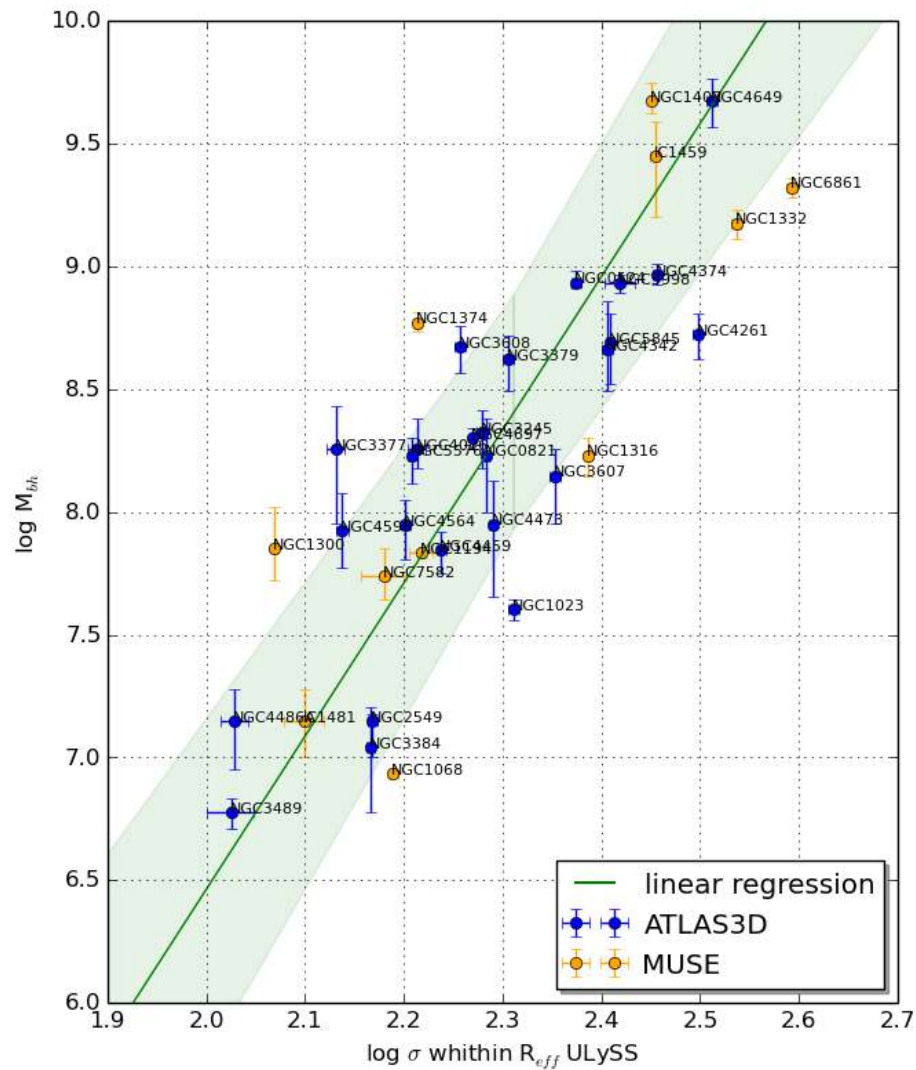
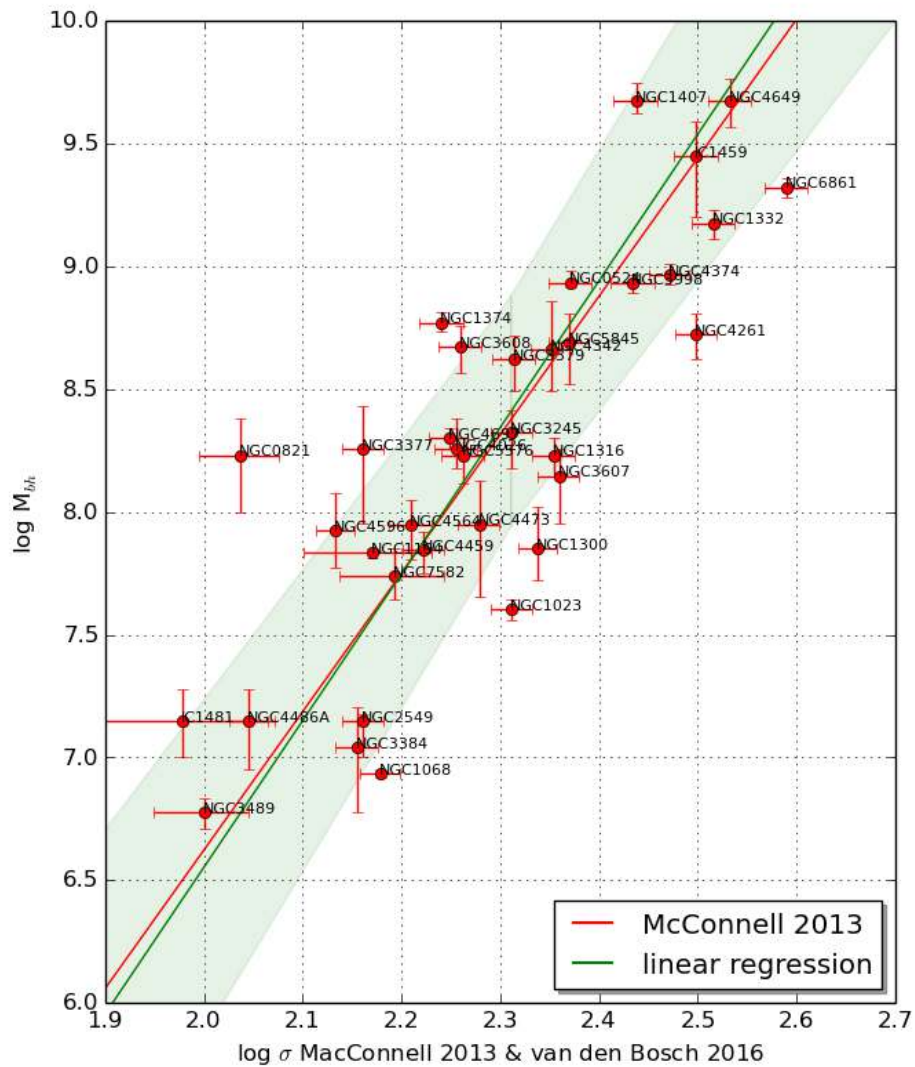


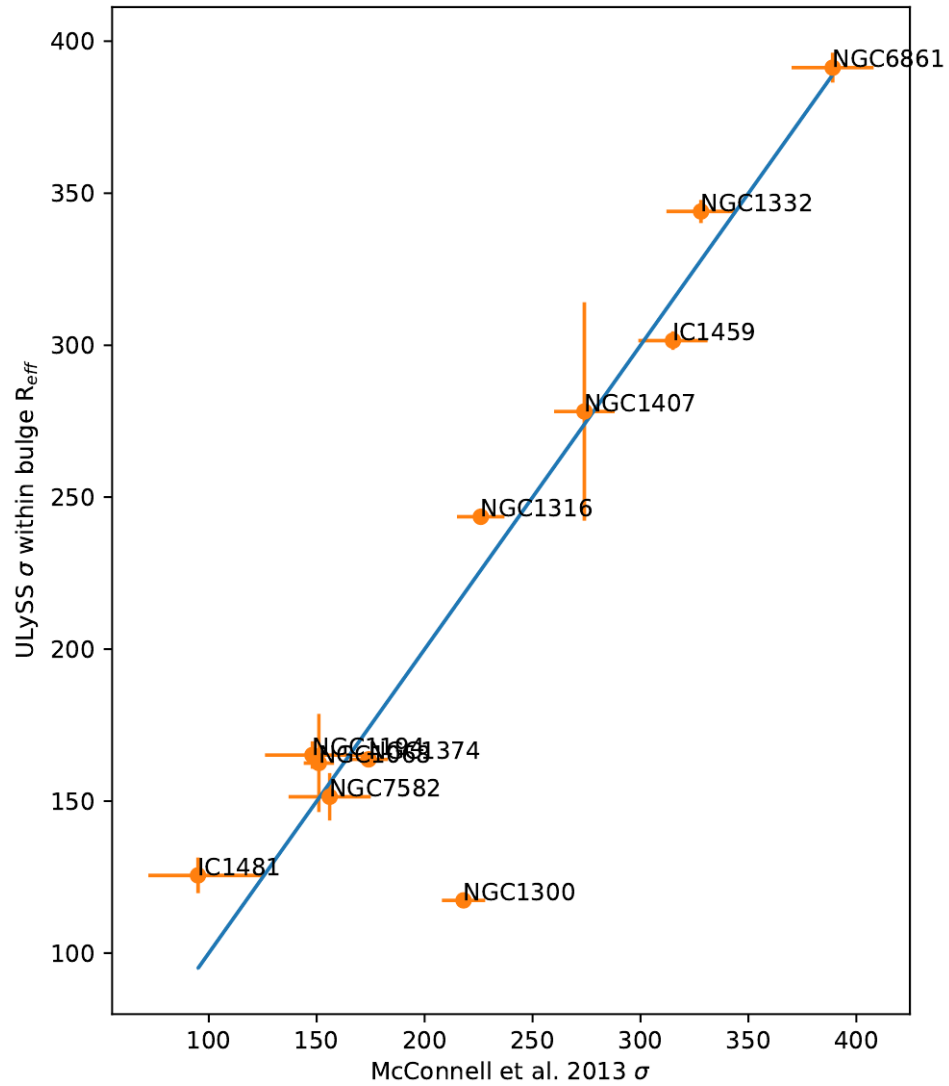
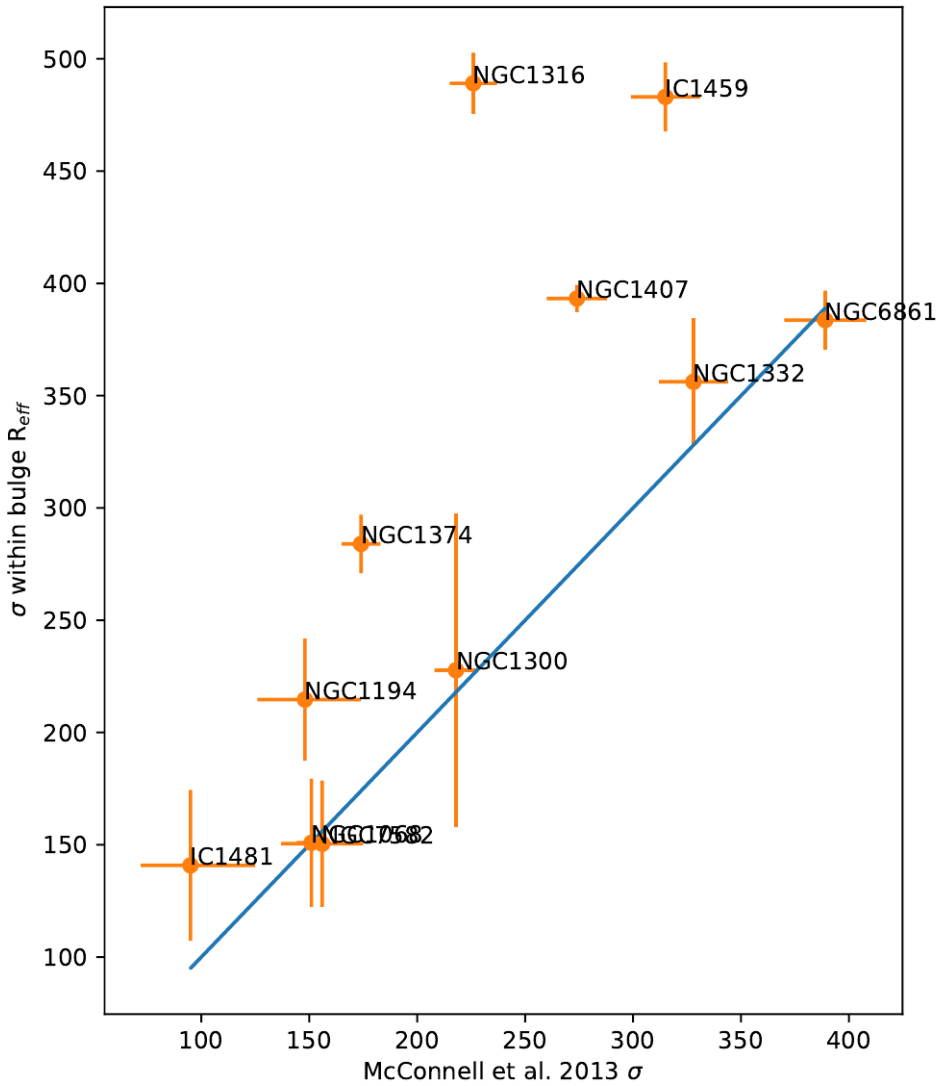
NGC1300











Спасибо за внимание!

