

Galaxies Lab Report

Part A:

Classifying visual

- a) E3
- b) Sa
- c) Sb
- d) E7
- e) Sa
- f) E0
- g) E7
- h) Sb
- i) E3

Classifying by ugr values

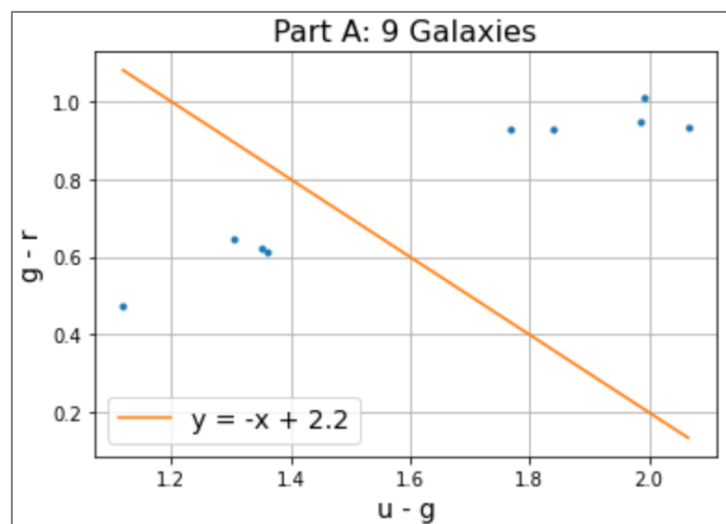


Figure 1 – colour-colour diagram of the 9 galaxies in part A

There is five late-type galaxies (top right) and four early-type galaxies (bottom left)

Galaxies in the top right are redder because they have higher g-r values and galaxies in the bottom left are bluer because they have a lower g-r value

According to the visual classification method 56% are elliptical (late-type) and 44% are spiral (early-type) and with classification by ugr values method it's also split by the same percentage. No difference in results between both methods.

Part B:

Criteria for picking galaxies is to choose galaxies with similar magnitudes (so roughly on the similar plane in space).

“Abell 2255 (hereafter A2255) is a rich galaxy cluster at low redshift ($z = 0.0806$; Struble & Rood 1999) that consists of a few hundred member galaxies.”

There are a few hundred galaxies in Abell 2255.

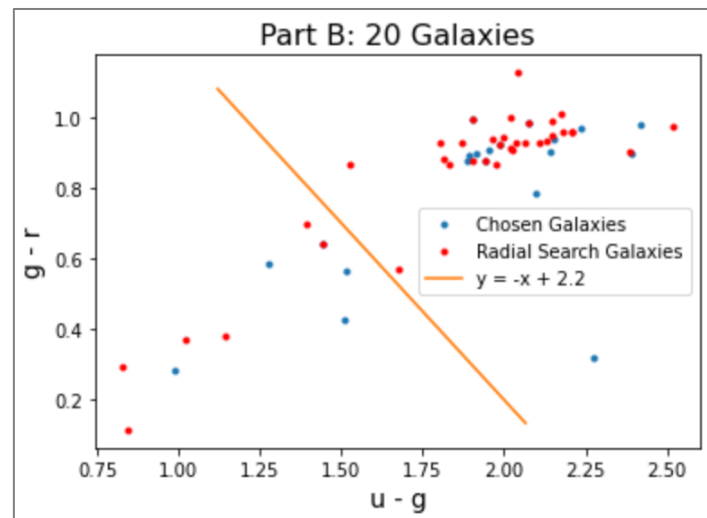


Figure 2 – colour-colour diagram of the 20 galaxies in part B