



Launch Extragalactic Color Magnitude Diagrams

Don't forget to record data and observations as you work through this activity. All of the questions and reminders from the activity are listed in order below.

1. Describe, draw, or insert an image of the galaxy Favourite you chose to import into Zoo Tools.
2. Describe, draw, or insert an image of where your galaxy is located on the color magnitude diagram in Zoo Tools.
3. Make a sketch of the color magnitude diagram as it is displayed in Zoo Tools. Label and explain the following features:
 - a. Y-axis – color
 - b. X-axis – absolute magnitude (r)
 - c. Red Sequence
 - d. Blue Cloud
 - e. Location of your galaxy

4. Consider that one of the bins on the color magnitude diagram has the rank of 1591/3505. The percentile for that rank is approximately 55. How would you interpret that number?

Ready, Aim, Collect

5. Choose a region on the color magnitude diagram to explore. Choose one bin on the diagram as your center point. Describe the location of your chosen center point in general, and record its rank and percentile.

6. Use the mouse-over feature to view galaxies representative of that region. Make a list of words that describes the shapes you see. You can use this list later to help you search for similar galaxies in Talk.

Results

7. Once you have created a collection of galaxies and imported them into the Zoo Tools Color Magnitude Diagram, describe and analyze your results. Paste a screenshot of your results if you can.

How close did you get to your target area? Were there any surprises? If you are working with others on this activity, compare results. Were there any types of galaxies that were more difficult to target than others? What have you discovered?