Abstract Evaluation

Name of Editor: Haley Bowden

Identify the below sections in the abstract – if you identify them, copy and paste the text/summarize as instructed. In all cases, add comments if: something is missing, the text could be made clearer and/or the arguments stronger.

* Started with one or two facts that relate to the problem statement (copy them here)

**Globular and open clusters are home to stars of various ages, with open clusters having stars that are approximately the same age. Interstellar dust, while important in the formation of stars, can often cause issues in observing the ages of the stars when viewing them ~~form~~ from earth.** The same age as what? Galaxies?

* Explained why these facts are important (copy line here)

**Understanding the formation of stars in these clusters is pivotal in understanding how these formations behave inside of a galaxy.**

* Introduced the problem (rewrite the problem in your own words)

**Interstellar dust, while important in the formation of stars, can often cause issues in observing the ages of the stars when viewing them ~~form~~ from earth. Understanding the formation of stars in these clusters is pivotal in understanding how these formations behave inside of a galaxy.**

How do stars form in clusters? I think I need a bit more info or clarification here. I don’t think dust is mentioned anywhere else, so it’s hard to see how it ties in. If it’s supposed to be something that has prevented this from being done before, how does the data from HST or your method get around this?

* Stated the goal (copy it here)

**We are proposing utilizing data from the Hubble Space Telescope via the WFC3/UVIS UV broadband and imagery from the Treasury Program LEGUS to identify clusters that showcase their behavior and impact on the surrounding galaxy.** I’m confused by this sentence. What does it mean for a cluster to “showcase their behavior”?

* What is the key component? (your words)

Data from the HST WFC3/UVIS UV broadband AND imagery from the Treasury Program LEGUS

* What is the target? (your words)

I think the target is clusters, but maybe it’s supposed to just be star-forming galaxies? I’m unclear what the “their” in your goal sentence is referring too.

* Explained the strategy. (copy here)
* Stated the importance of the solution *to the subfield* (copy here)

**This will allow us to visualize star clusters whose molecular structures and age can give us more information about their galaxy.** This might just be because of unfamiliarity with the field, but “molecular structures” does not seem like what you mean here.

* Explained the broader implications of results to *other subfields* (copy here)

**This is pivotal in understanding ~~galaxias formation and density~~ [galaxy formation and density] to understand how they may interact with both other galaxies and their internal clusters. This will allow us to use the data for future stellar structure studies as structures change.**

Globular and open clusters are home to stars of various ages, with open clusters having stars that are approximately the same age. Interstellar dust, while important in the formation of stars, can often cause issues in observing the ages of the stars when viewing them form earth. Understanding the formation of stars in these clusters is pivotal in understanding how these formations behave inside of a galaxy. We are proposing utilizing data from the Hubble Space Telescope via the WFC3/UVIS UV broadband and imagery from the Treasury Program LEGUS to identify clusters that showcase their behavior and impact on the surrounding galaxy. This will allow us to visualize star clusters whose molecular structures and age can give us more information about their galaxy. This is pivotal in understanding galaxias formation and density to understand how they may interact with both other galaxies and their internal clusters. This will allow us to use the data for future stellar structure studies as structures change.

1. Fact
2. Not sure if this counts as another fact or part of the problem
3. Could be importance of the first fact or the problem
4. Goal
5. Not sure if this would be the strategy or if the strategy is missing and this is just an importance of the solution statement
6. Importance of solution/broader impact