# Astronomy 3013 AI Assignment 2

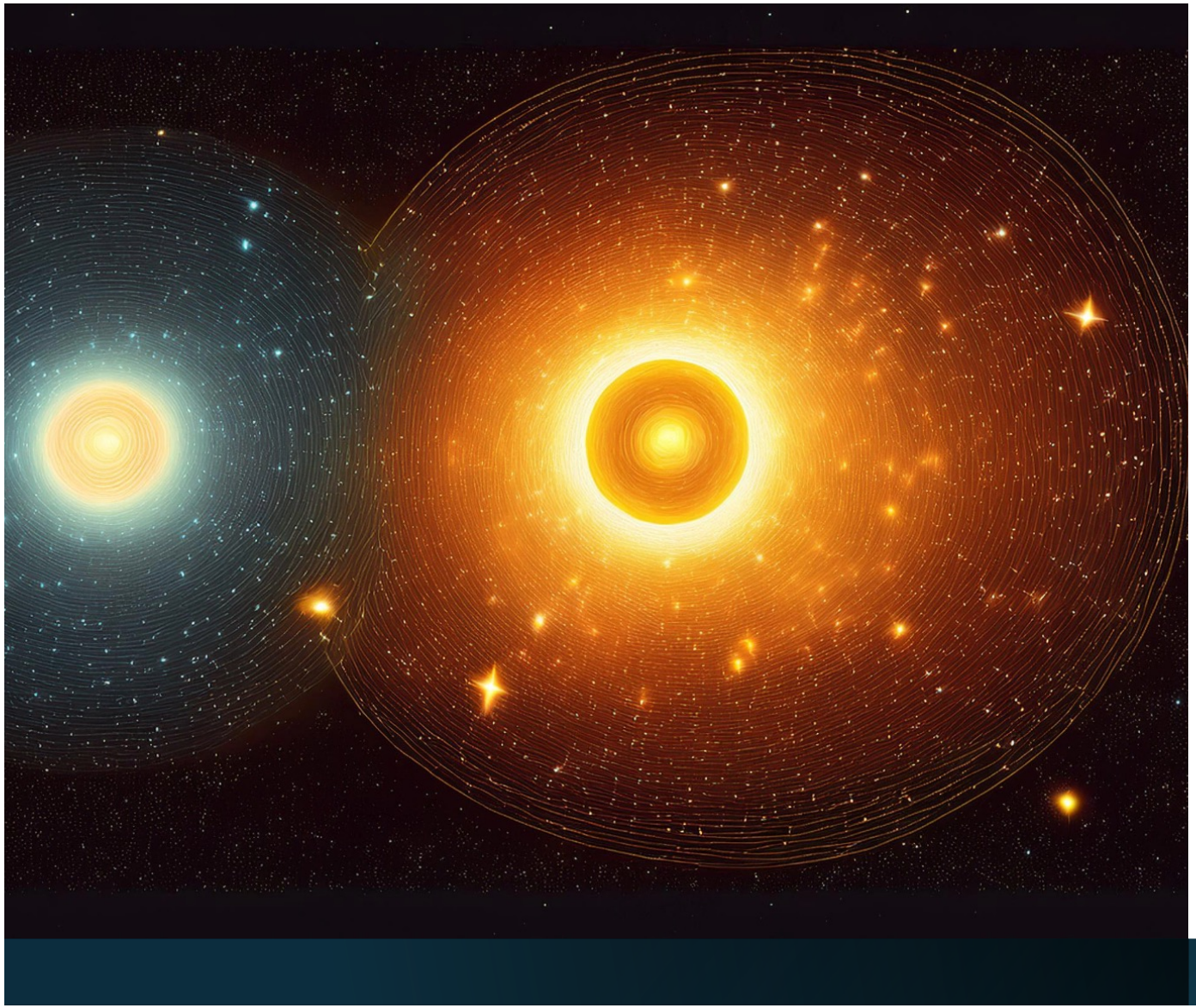
As you have found in this course, astronomy presents and discusses concepts that are often far outside of our everyday lives and typical understandings (such as distances, redshift, black holes, life on other planets, etc. etc.). For that reason, I have often used graphics and/or videos in this course to help explain and illustrate the more esoteric ones. Use Adobe Express to construct an artificial intelligence (AI) generated image that illustrates *any* concept that you have found particularly interesting **and** challenging to understand. The finished product should be as far as possible scientifically accurate (based on knowledge in this course and supplemented by other *accepted* sources (i.e. no conspiracy theories nor UFO images please...)).

**Submission Materials**

1. The scientifically valid image
2. The prompt(s) that you used to help generate the image
3. A short (1 paragraph, any format) explanation of the image highlighting the components that are particularly scientifically accurate and inaccurate (if any)

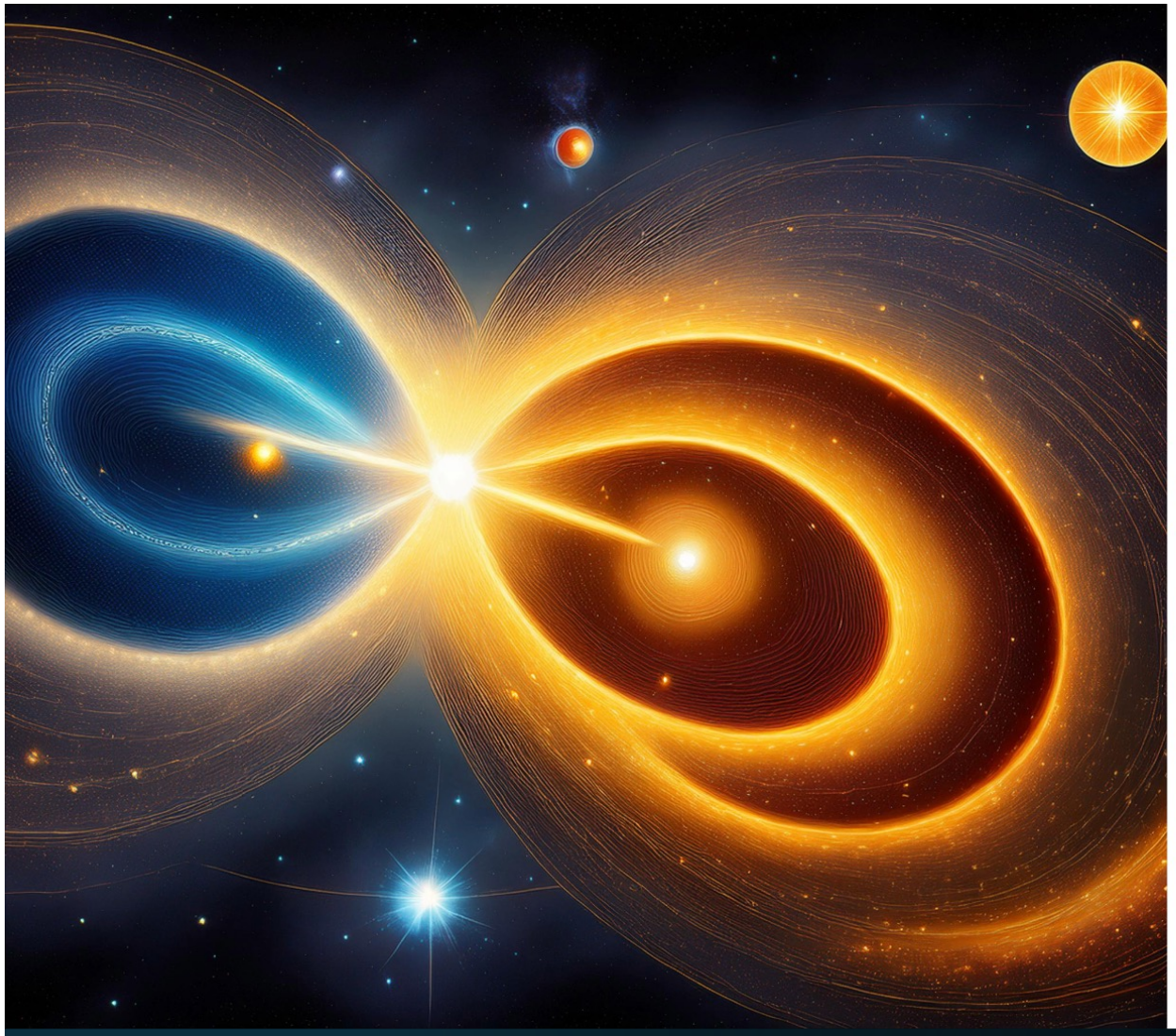
**More Technical Details**

1. Image size must be 1920x1080 pixels
2. Must be a single image with up to 5 layers
3. Your image must be produced with Adobe Express AI, but you can use Express graphics to represent illustrated elements such as wavelengths, etc.
4. Image must be uploaded through Canvas in .png or .jpg formats
5. Name of image must be ast3013_familyname.png or ast3013_familyname.jpg, where you must replace familyname with your family name.



**Prompt:** Binary star system with two stars, one that is bigger than the other, and show them exchanging dust with each other.

- I chose a binary star system that behaves as a contact binary star system for this assignment.
- The characteristic circlular dust around both of the stars and their relative mass exchange (upon exceeding the necessary Roche limit for this binary system) is not accurate
- The AI image fails to recognize important nuances about the stars themselves, such as the evolutionary state of stars and how exactly the stars are supposed to interact with one another gravitationally.



# Differences

- This new image that has been generated now has a better sense of how two stars that are regularly interacting with each other's Roche limits have dust shells that are gravitationally bound to one another.
- This gravitation causes what appears to be a figure-eight shape around the binary star system.
- In addition to the dust shell generation, there is also a Lagrange point in the middle of both stars.

# Critiques on Astronomy 3013 AI Assignment 2

- I learned how to use Adobe tools and still use Adobe tools!
- Eduacted me on the proper uses of AI
- Increased my physical understanding of astrophysics
- Educated me on the failings of AI