

Art and the Universe

An Intersection of Understanding and Beauty

Zolt Levay
STScI

Art and the Universe

- 📖 Astronomy is a visual science.
- 📖 Astronomy in art or art in astronomy?
- 📖 Images of the sky are nature photography.
- 📖 Art/Photography techniques enhance science images.

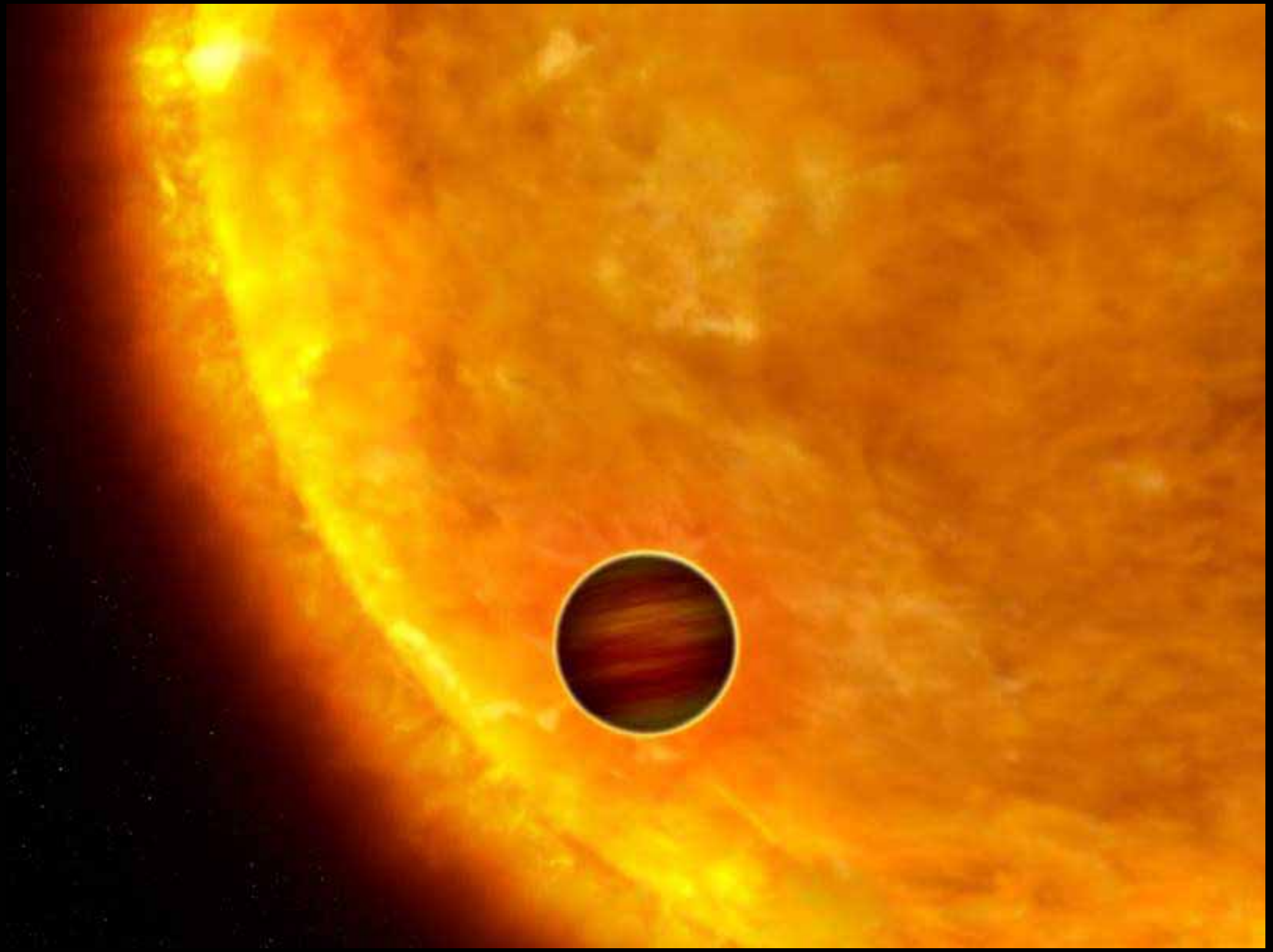


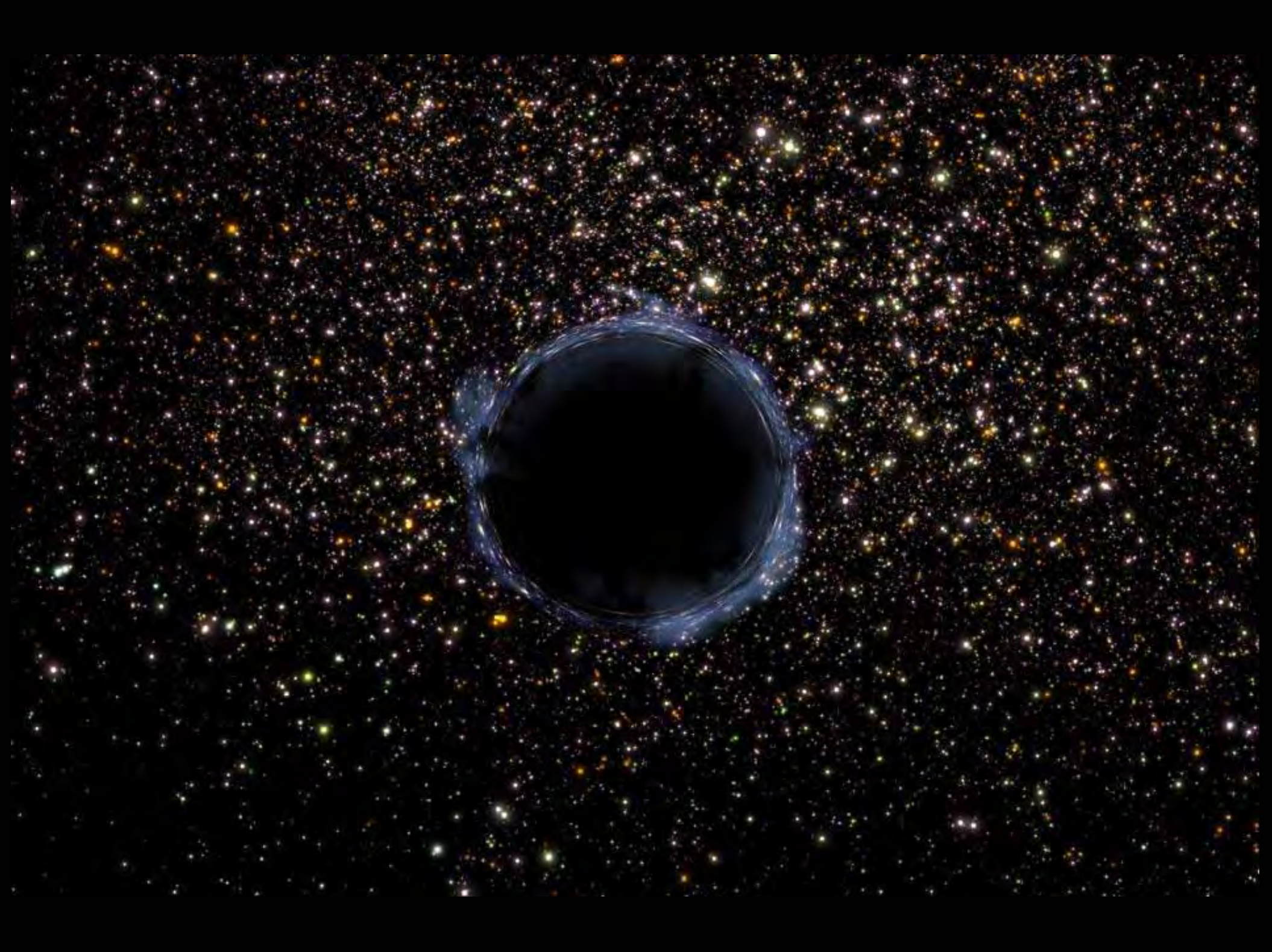


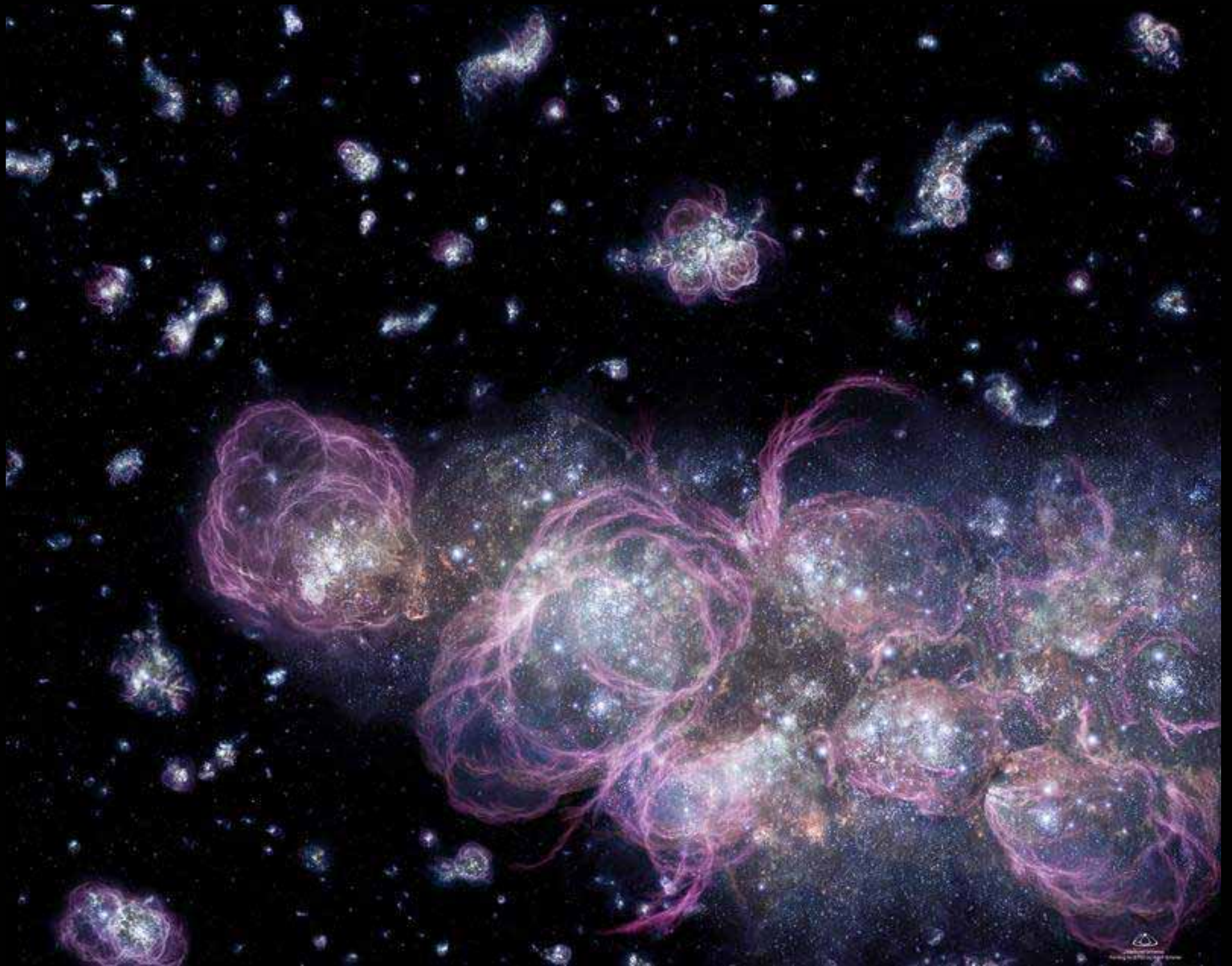
Space Art

- 📖 Paintings with astronomy or space subject.
- 📖 Art media and technique.
- 📖 View based on known properties.
- 📖 Artistic license completes unknowable details.











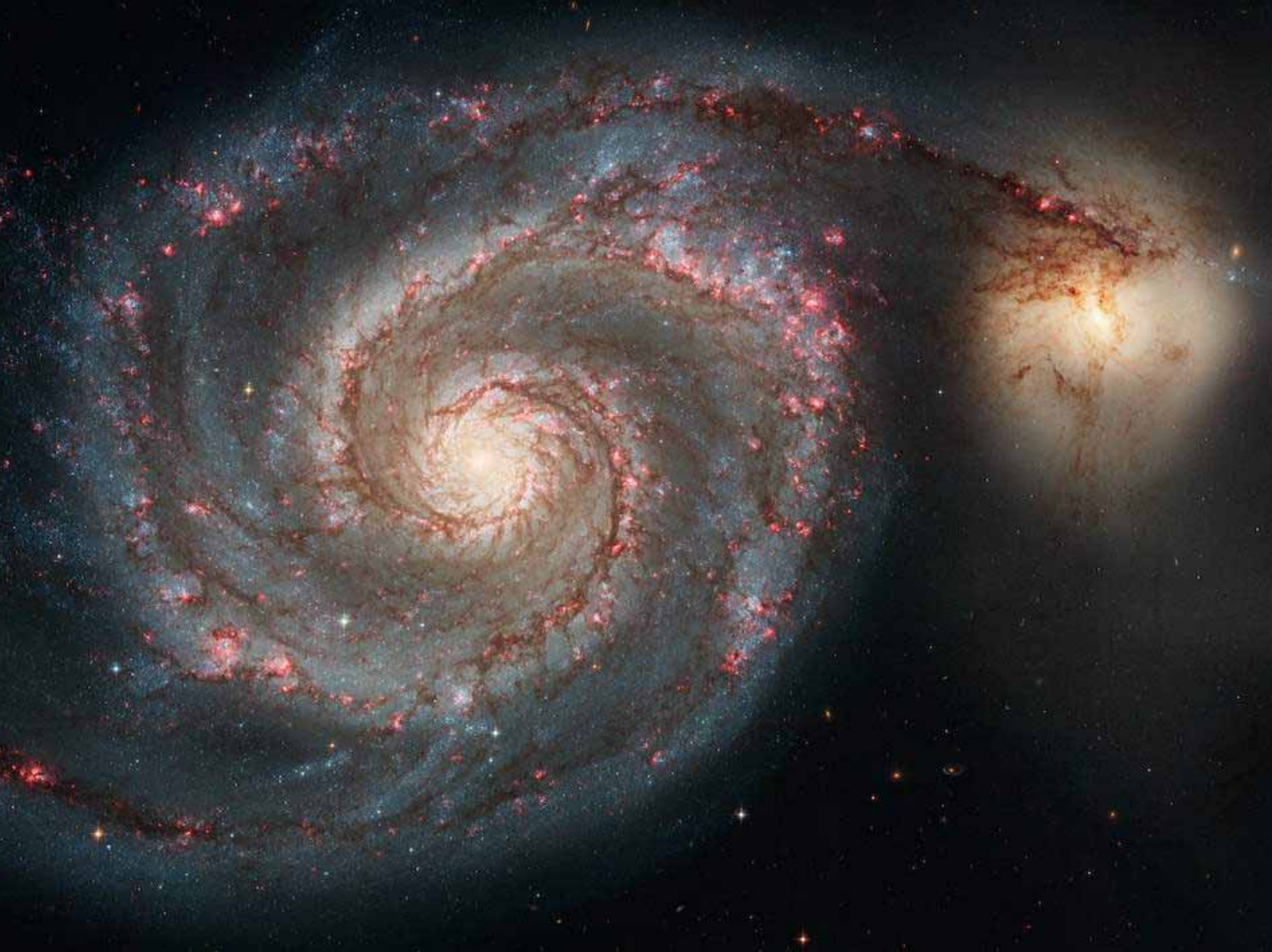


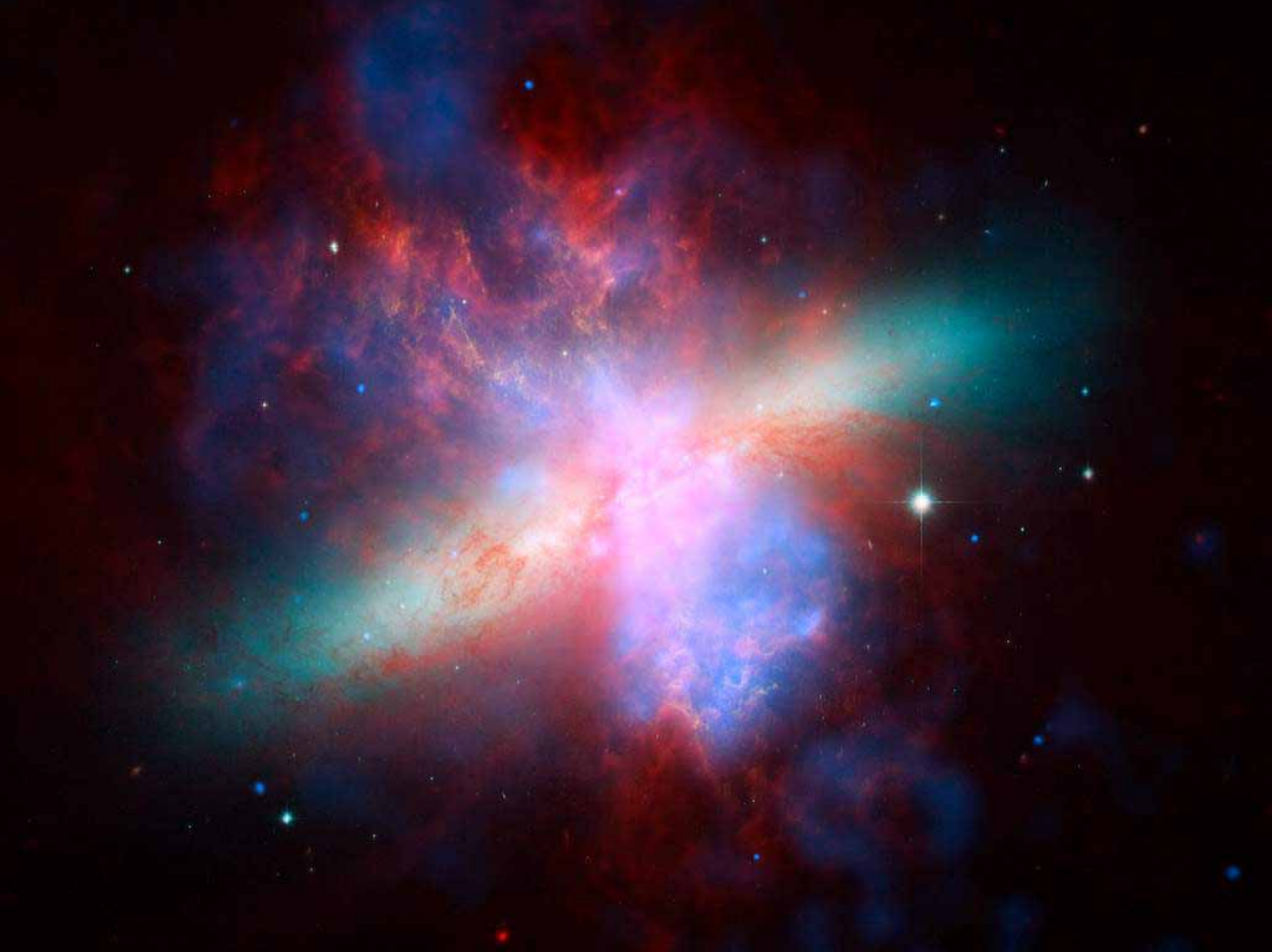










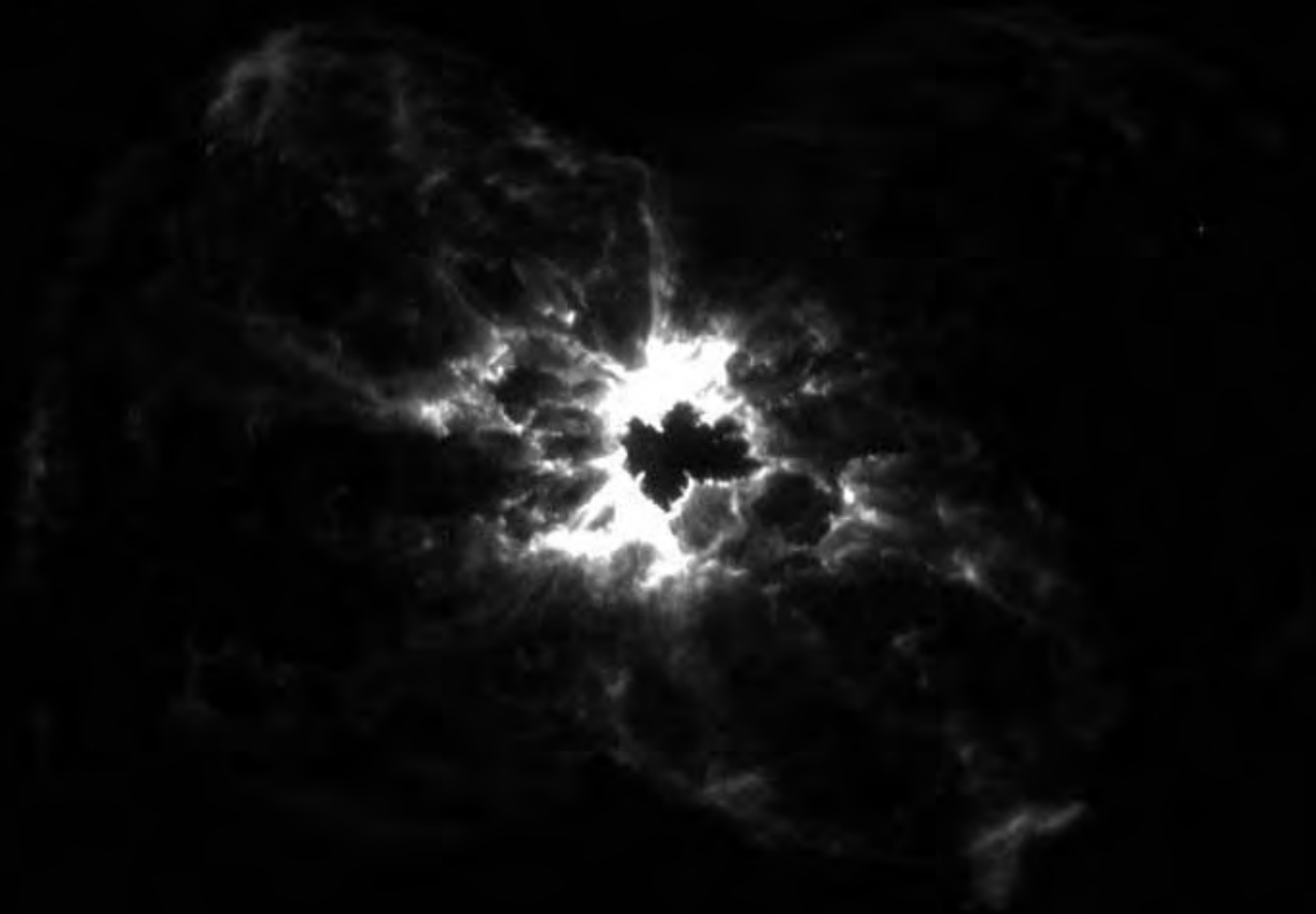


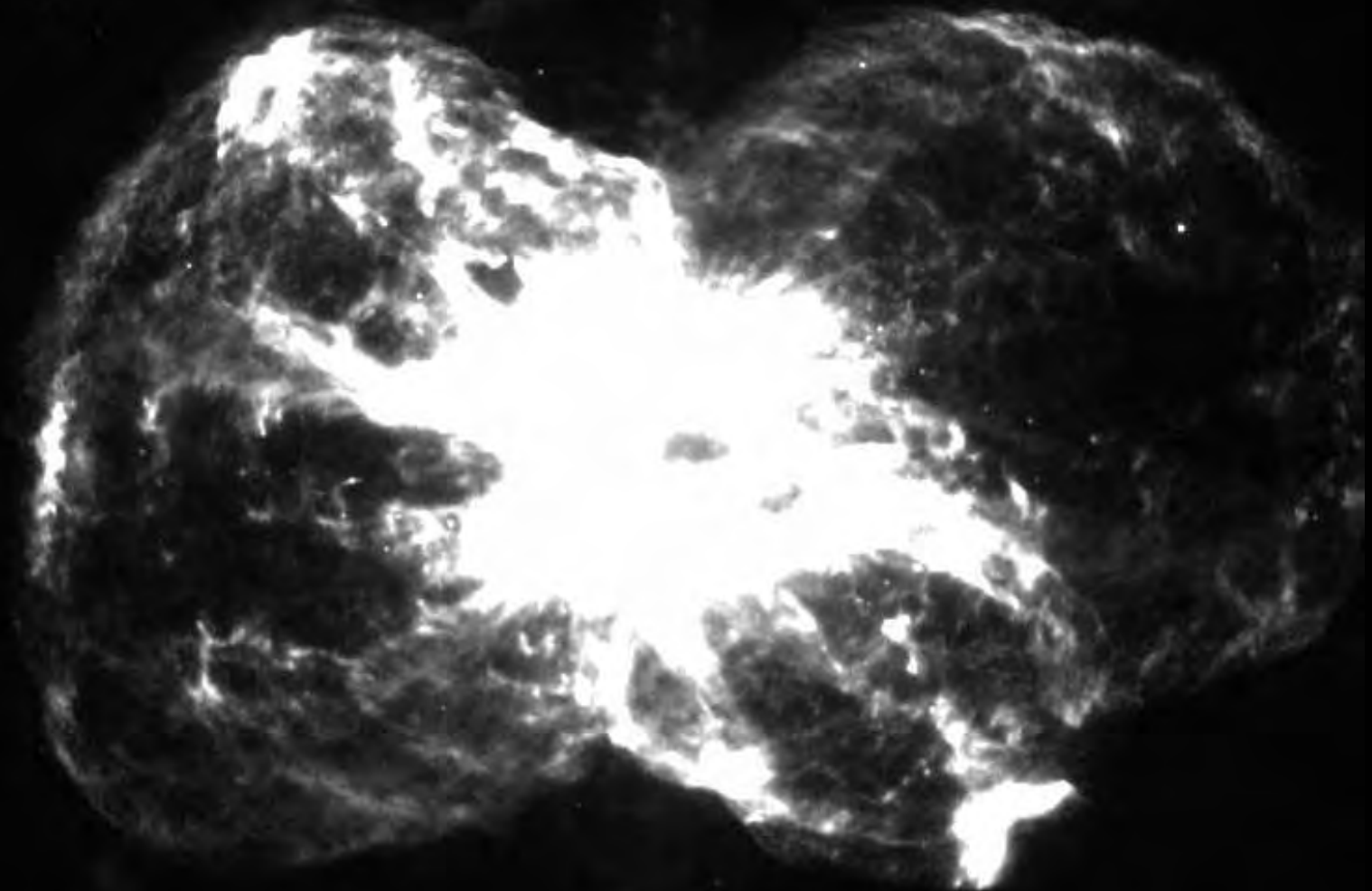


Art from Science

- 📖 Starts with science data.
- 📖 Photography techniques make features in the data visible.
- 📖 Combine exposures, reconstruct color.
- 📖 Art principles can make science images visually more pleasing.

Science Data



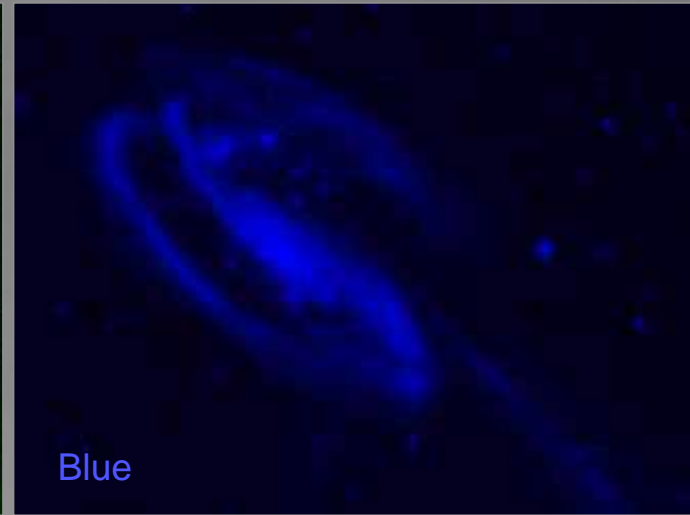
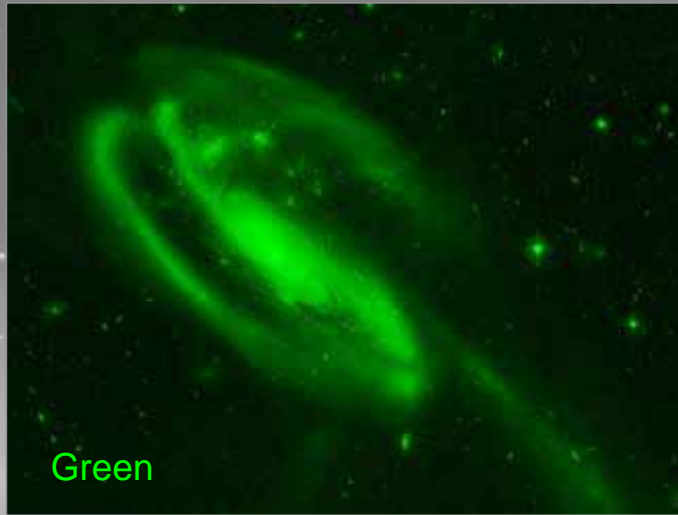
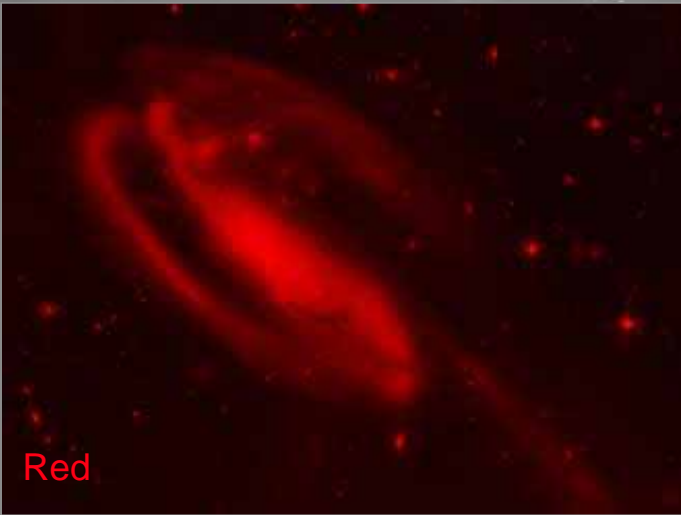




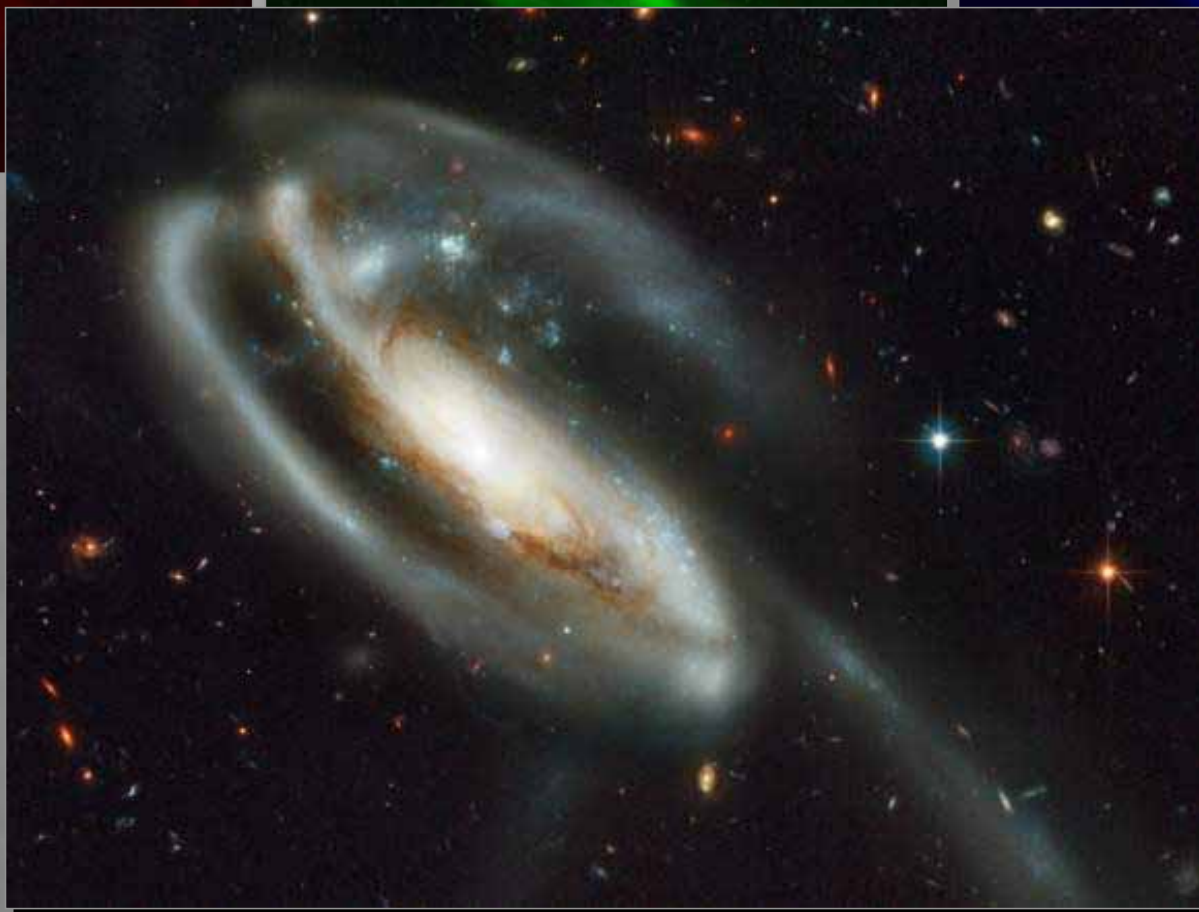
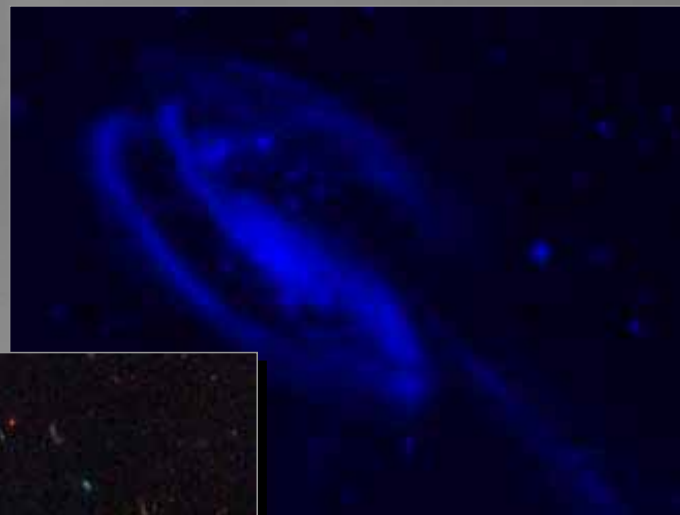
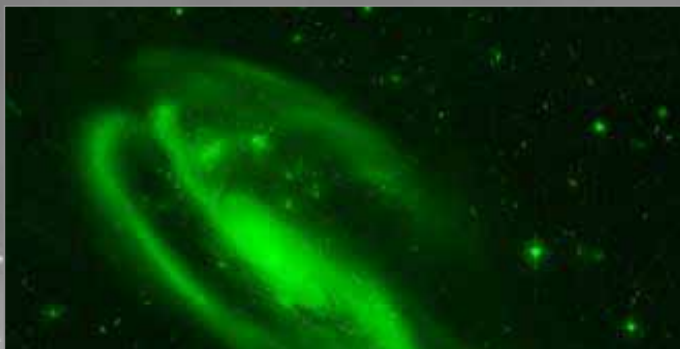
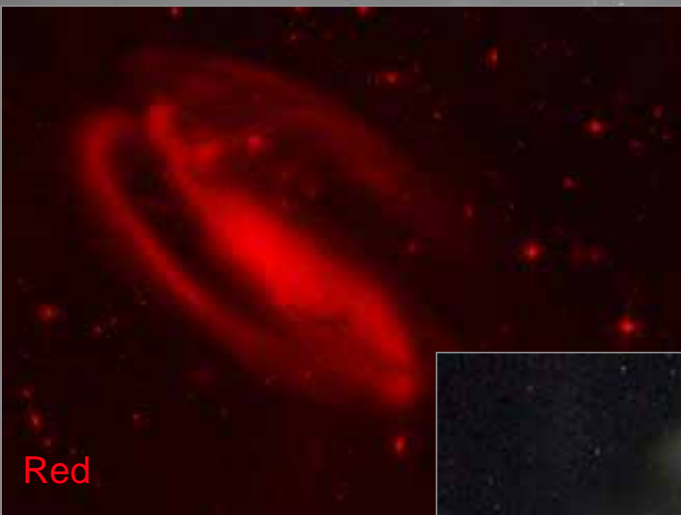
“Natural” Color Composite



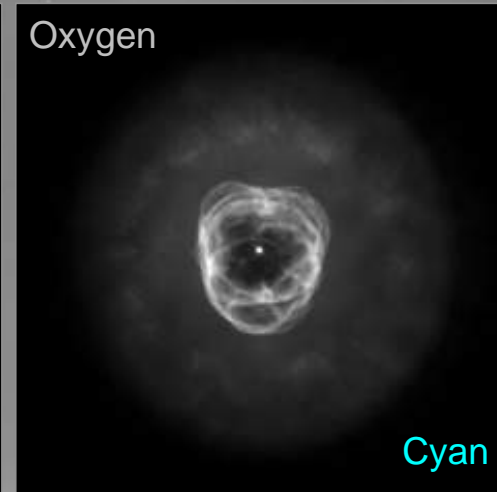
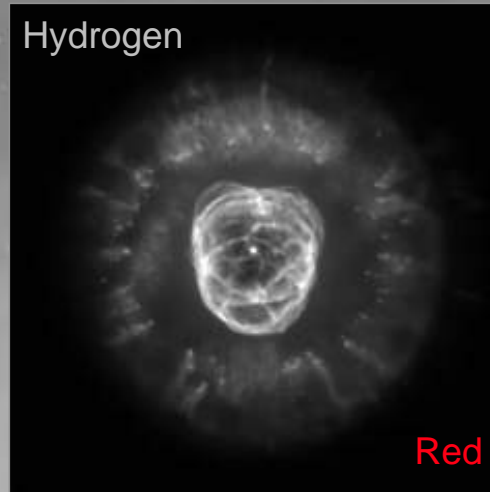
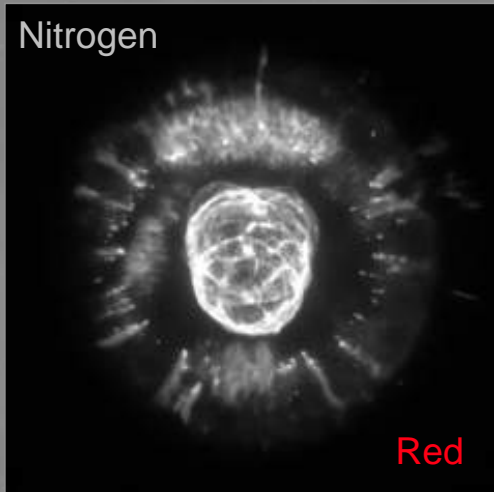
“Natural” Color Composite



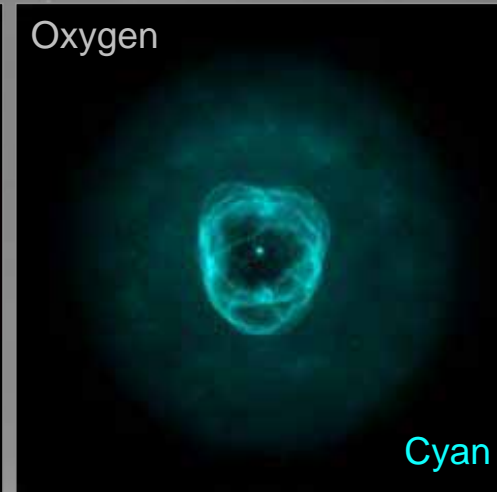
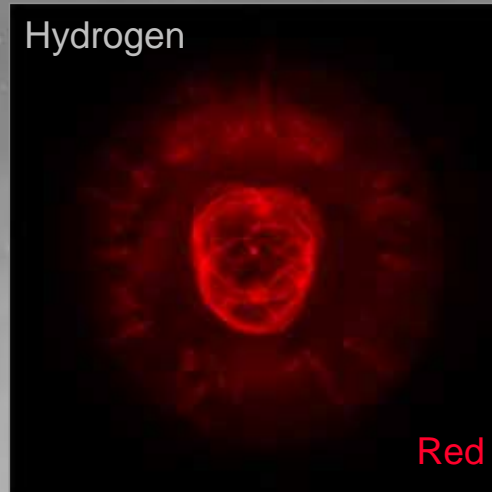
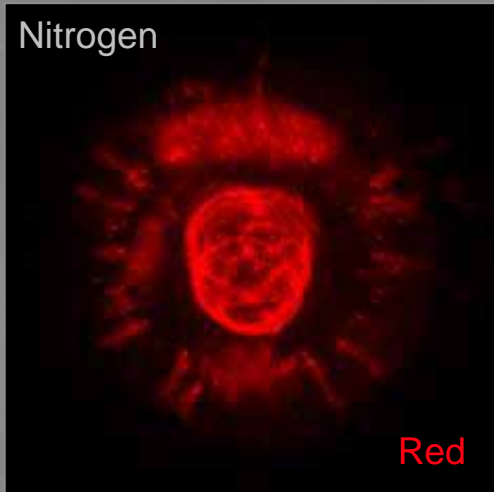
“Natural” Color Composite



Alternate Color Scheme



Alternate Color Scheme



Alternate Color Scheme

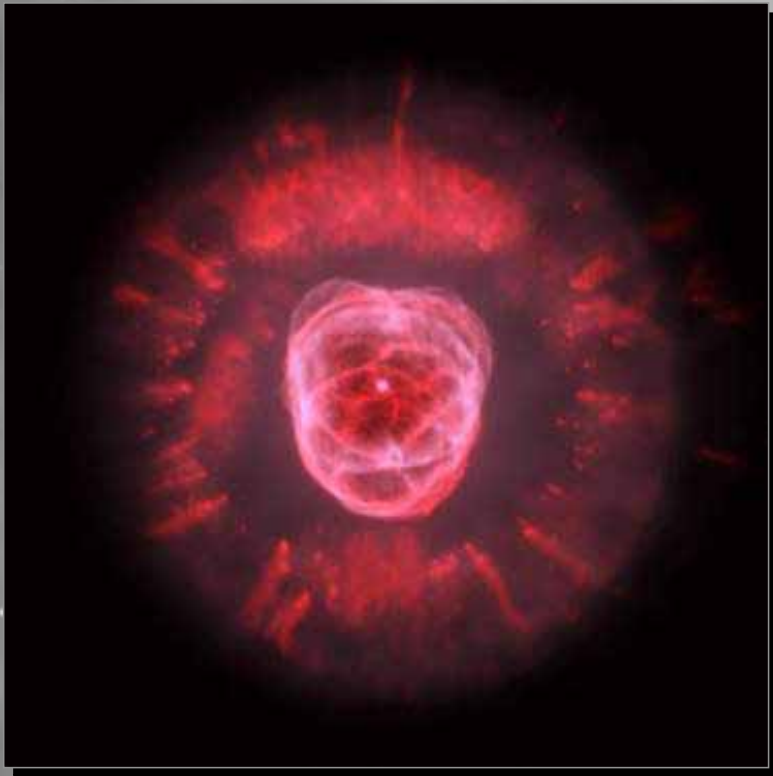
Nitrogen



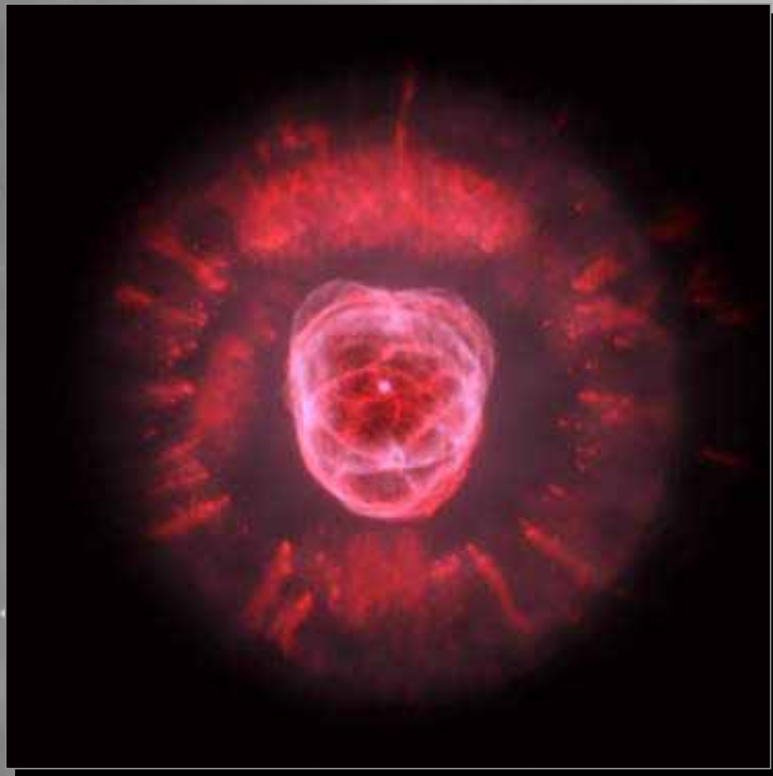
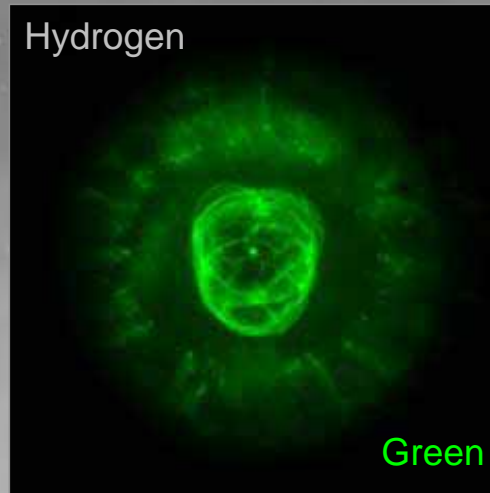
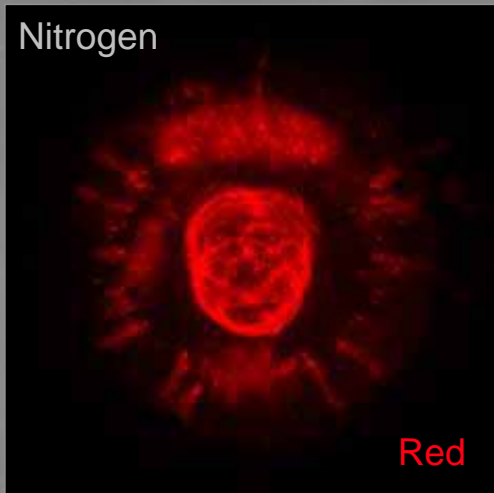
Hydrogen



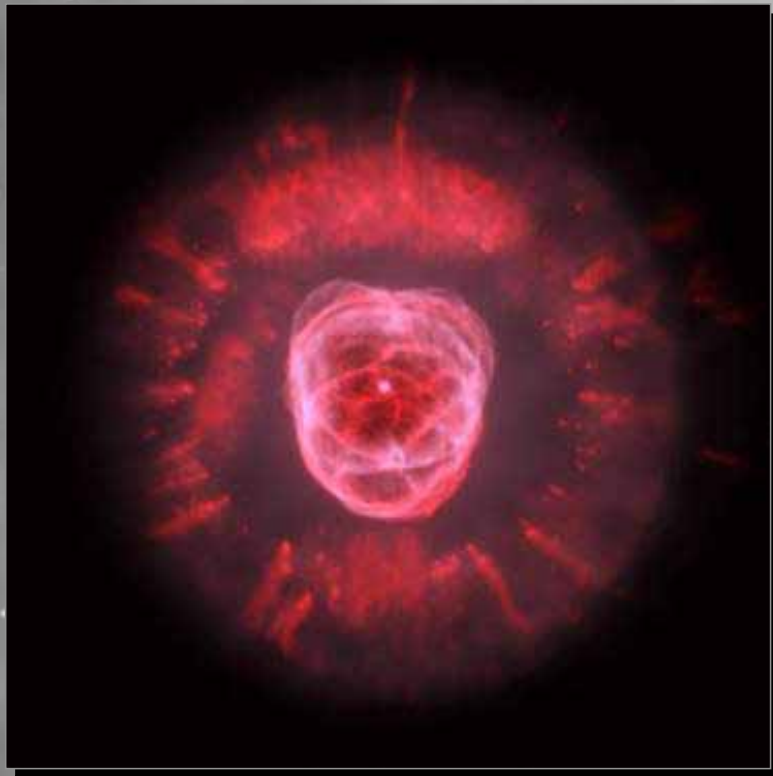
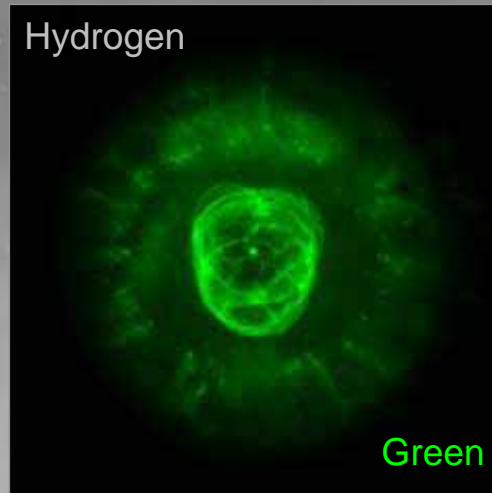
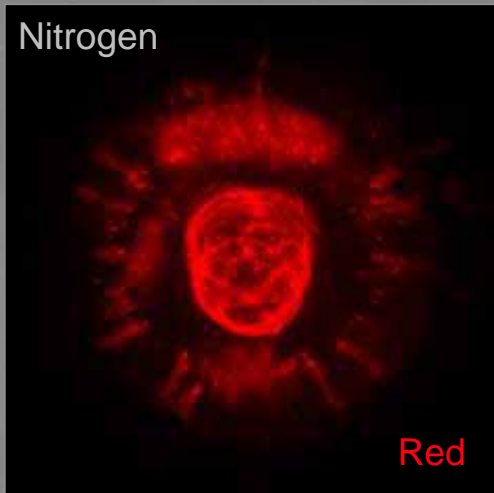
Oxygen



Alternate Color Scheme



Alternate Color Scheme

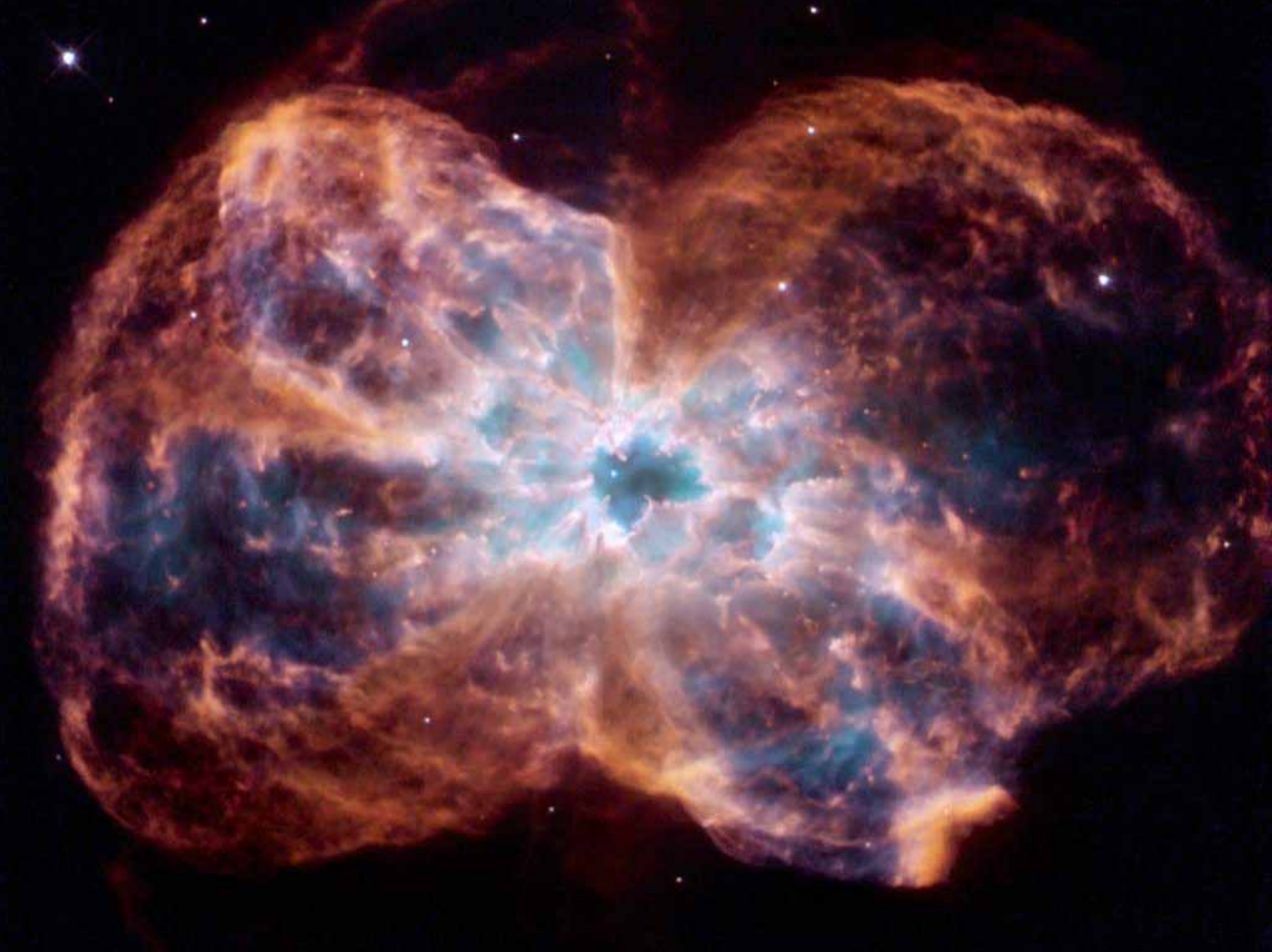


Useful Art/Photography Principles

- 📖 Color, form, texture.
- 📖 Composition.
- 📖 Lighting, tonality.

Adjust Color

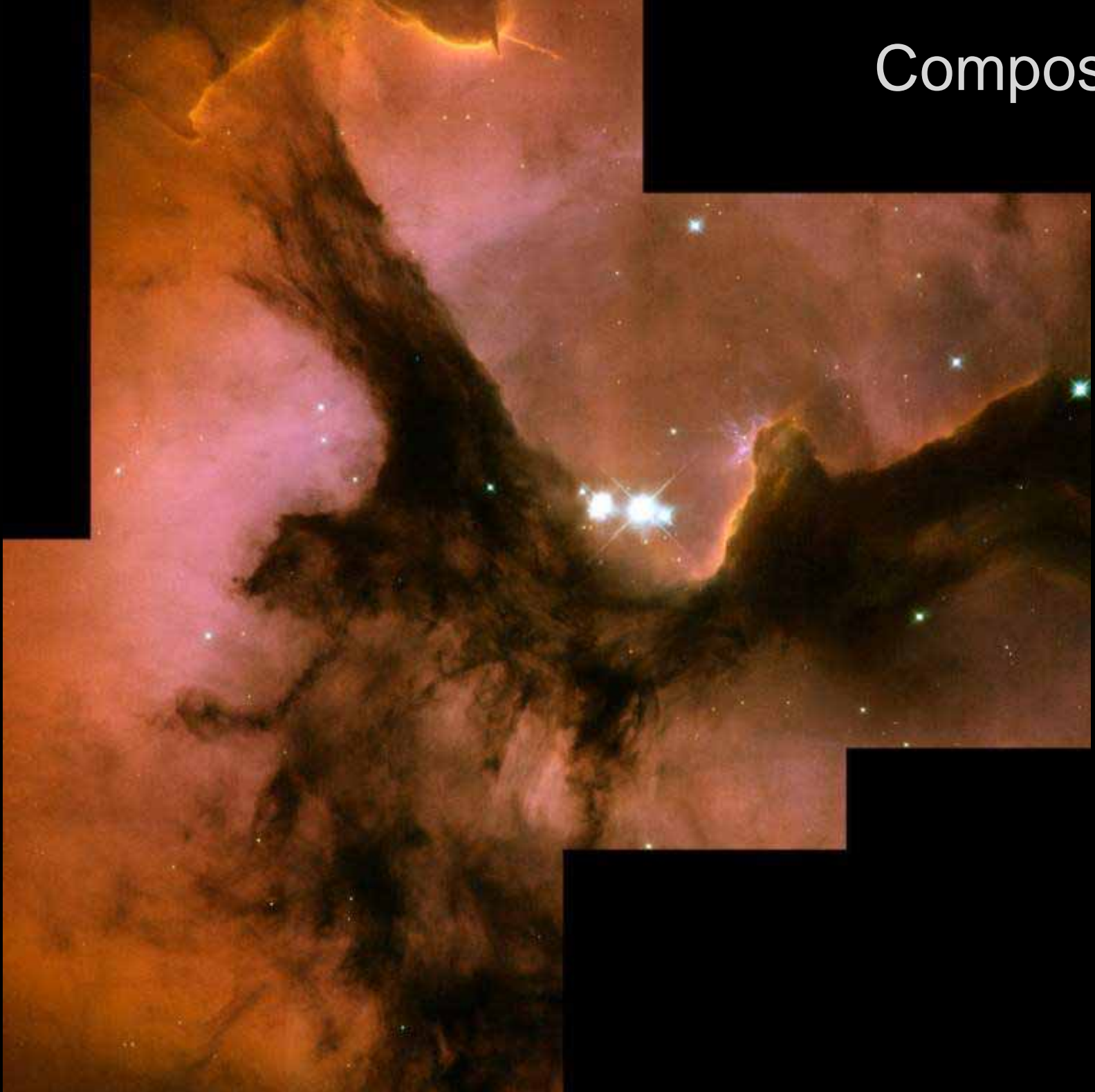


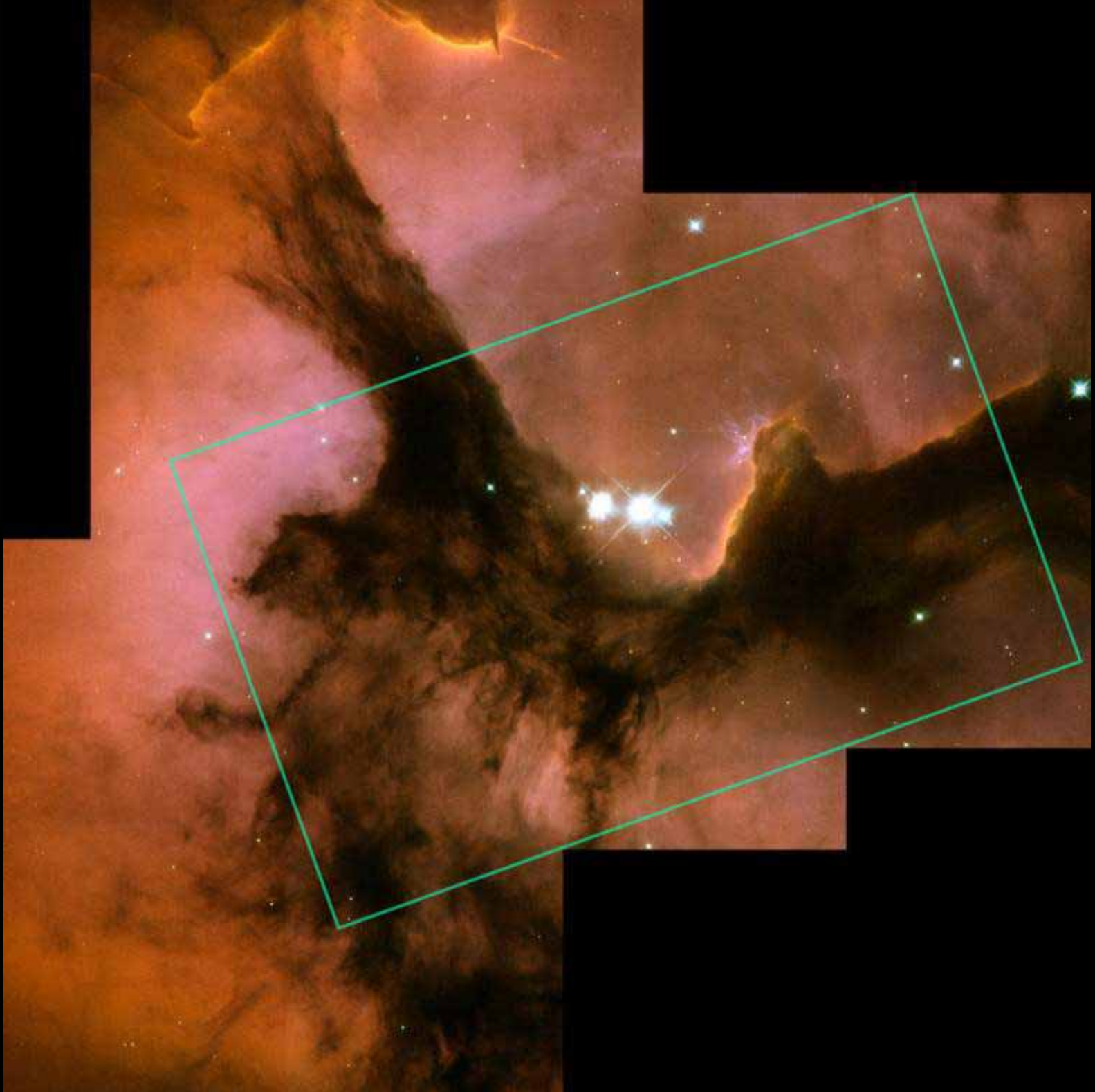


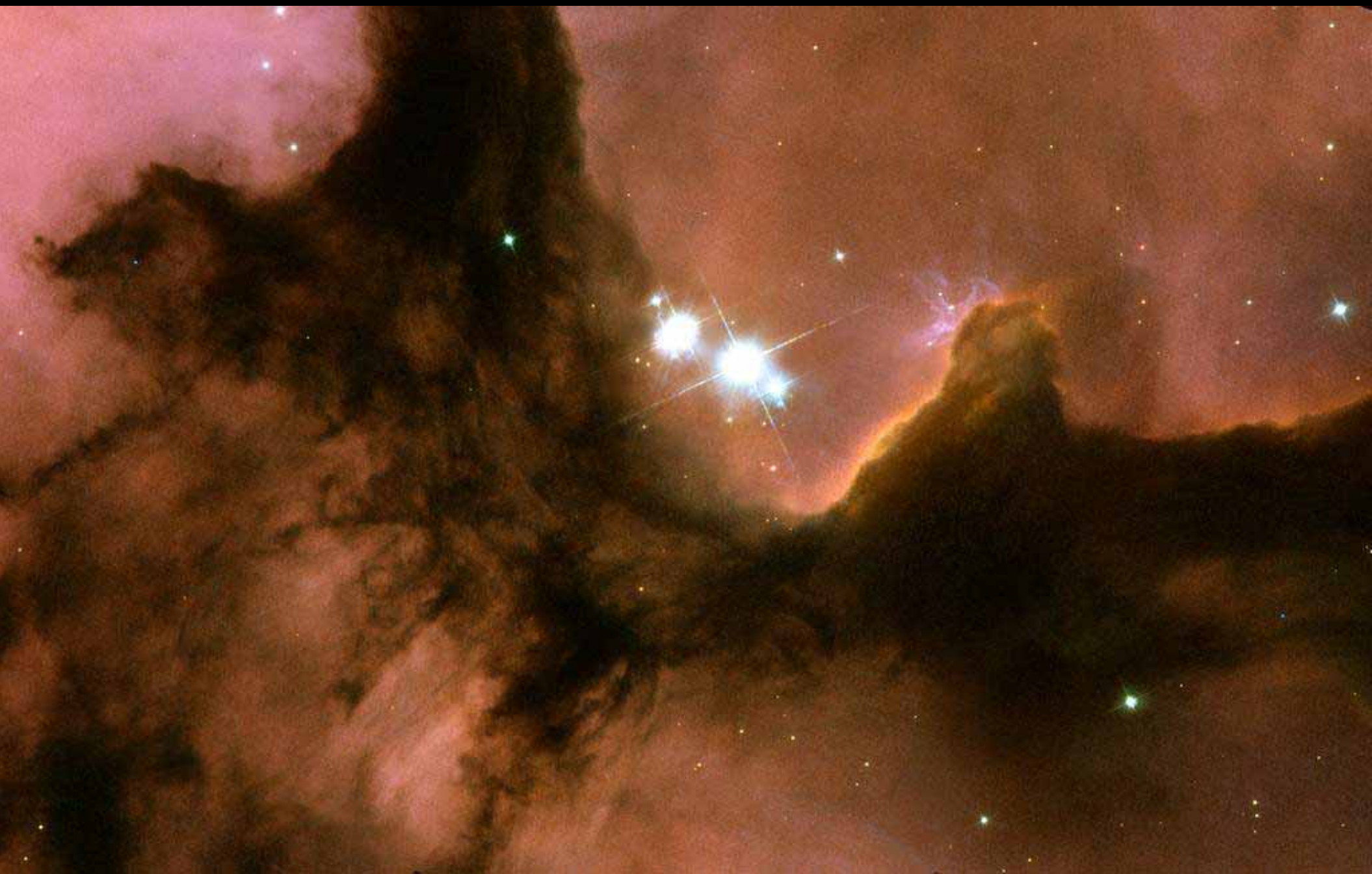




Composition











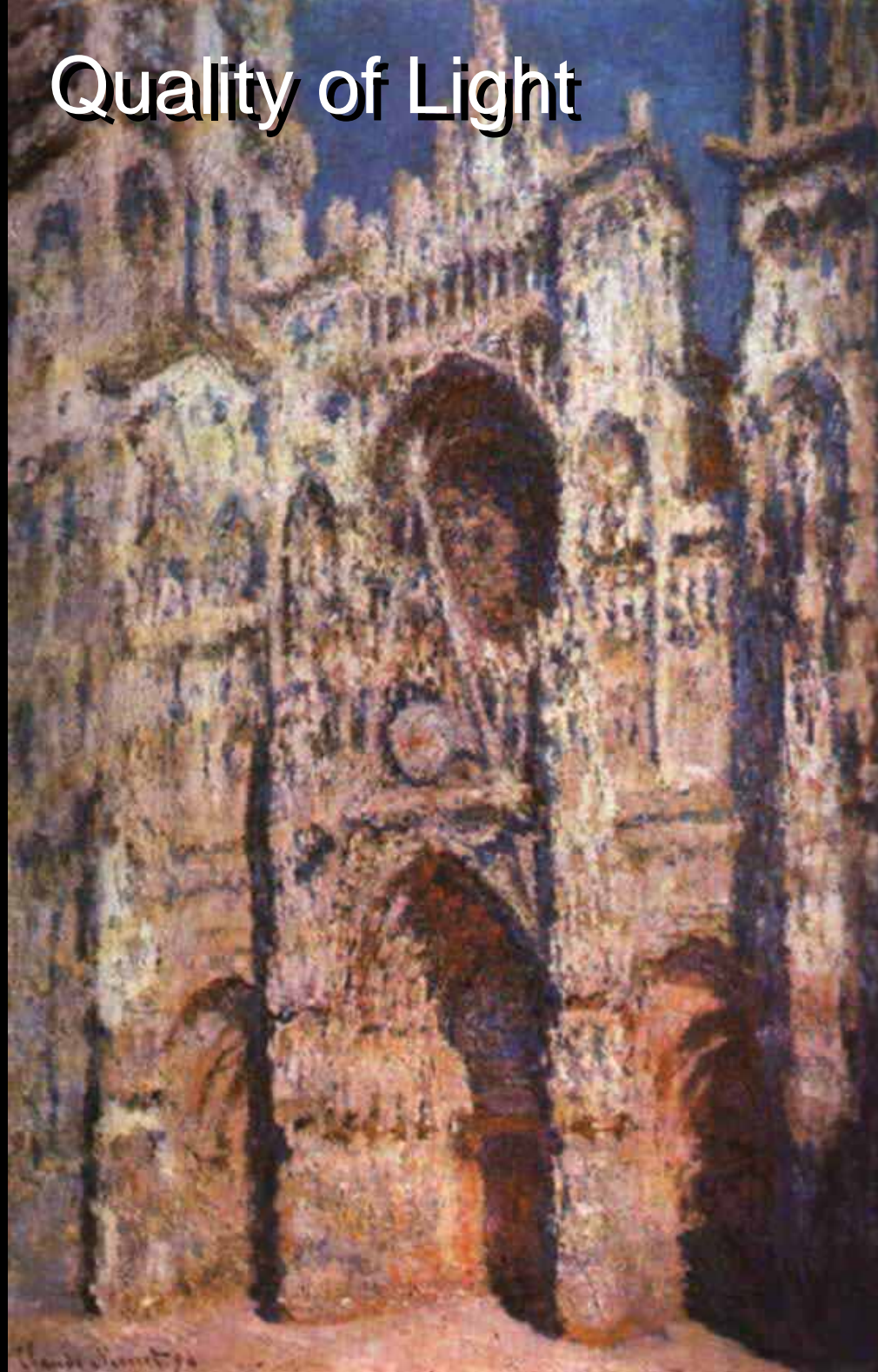








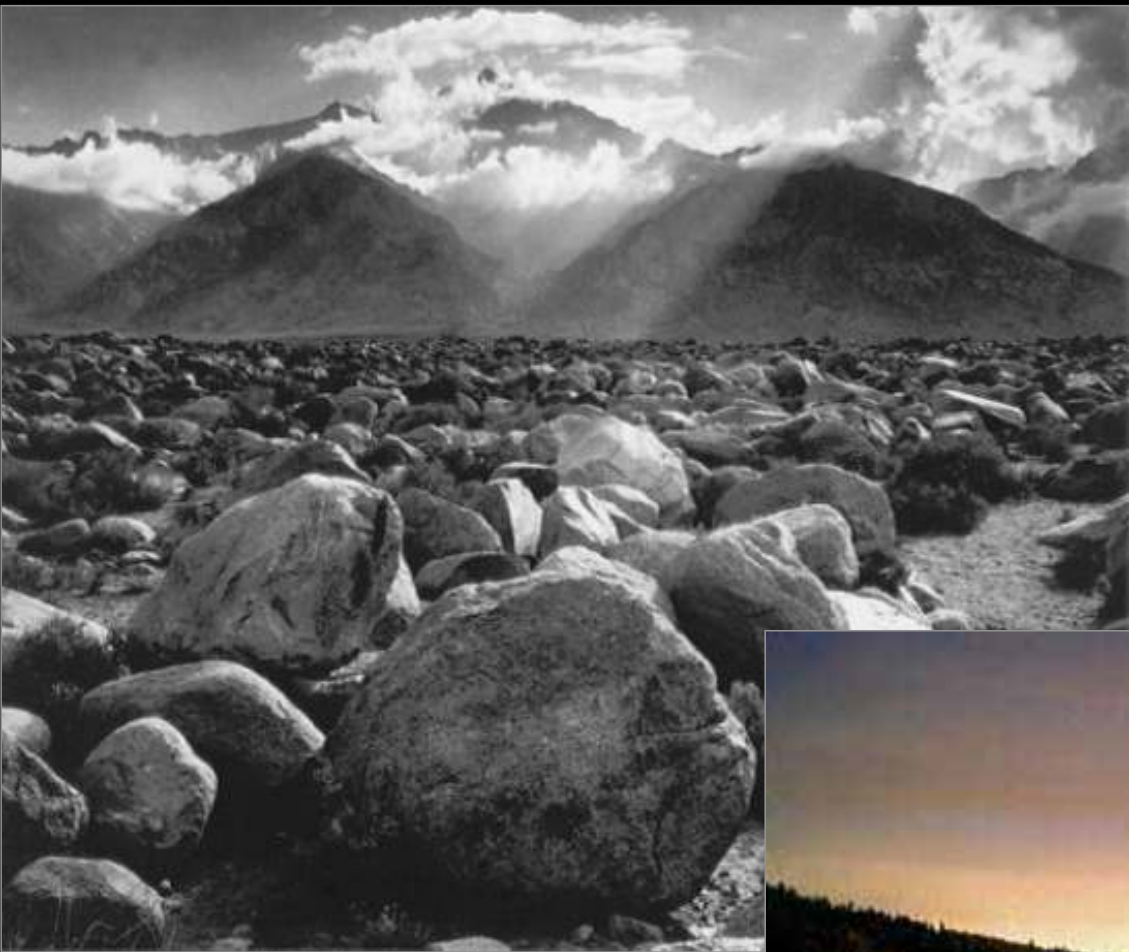
Quality of Light









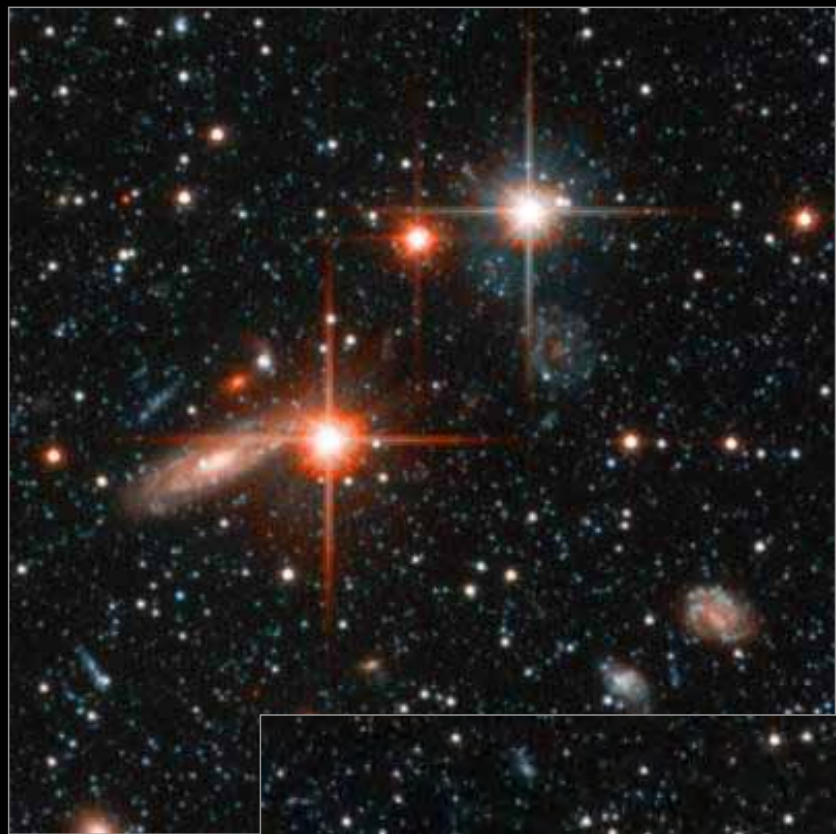






Conceptual Art?

- 📖 Real photograph.
- 📖 Abstract composition.
- 📖 What are we looking at?



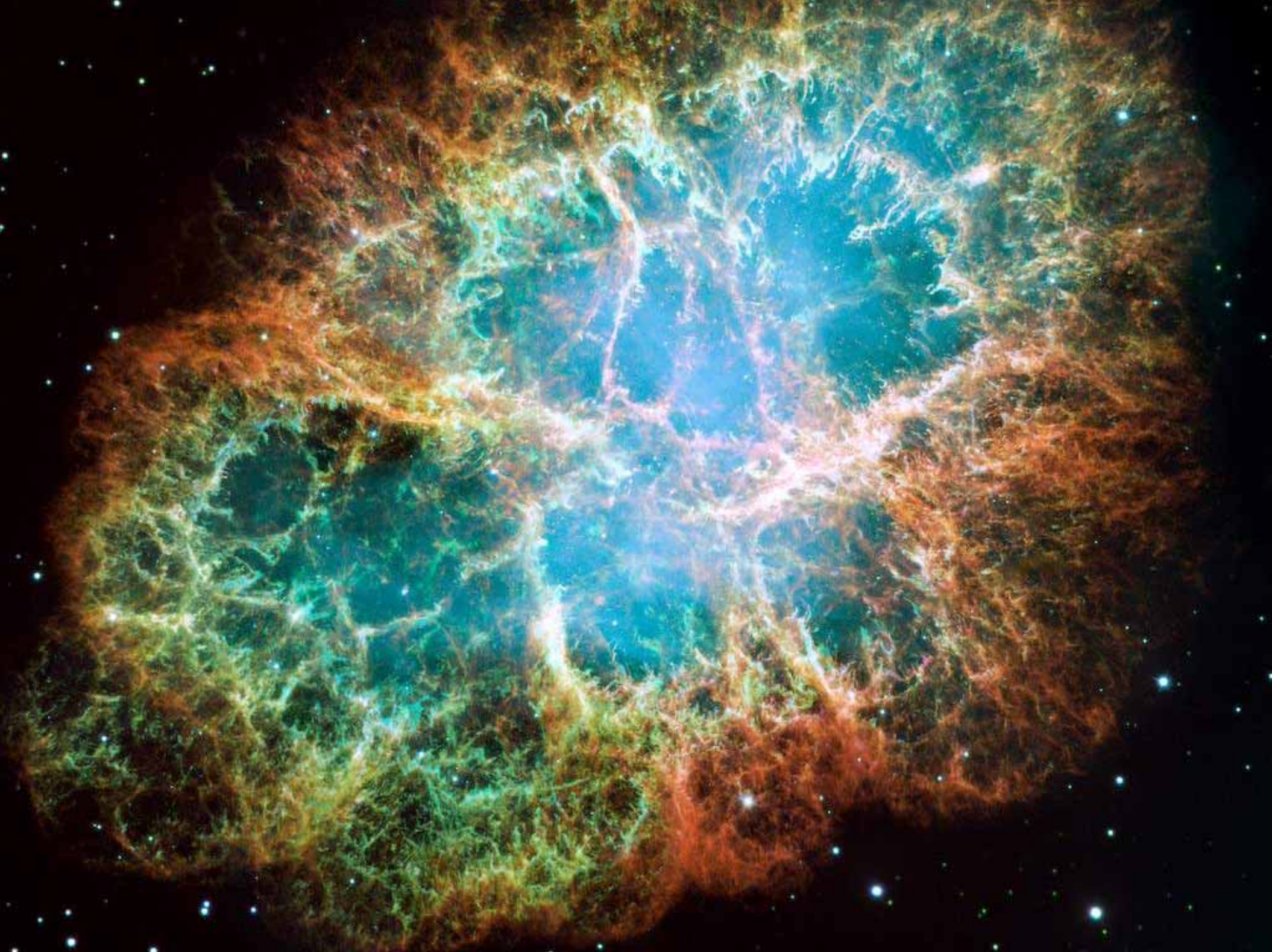




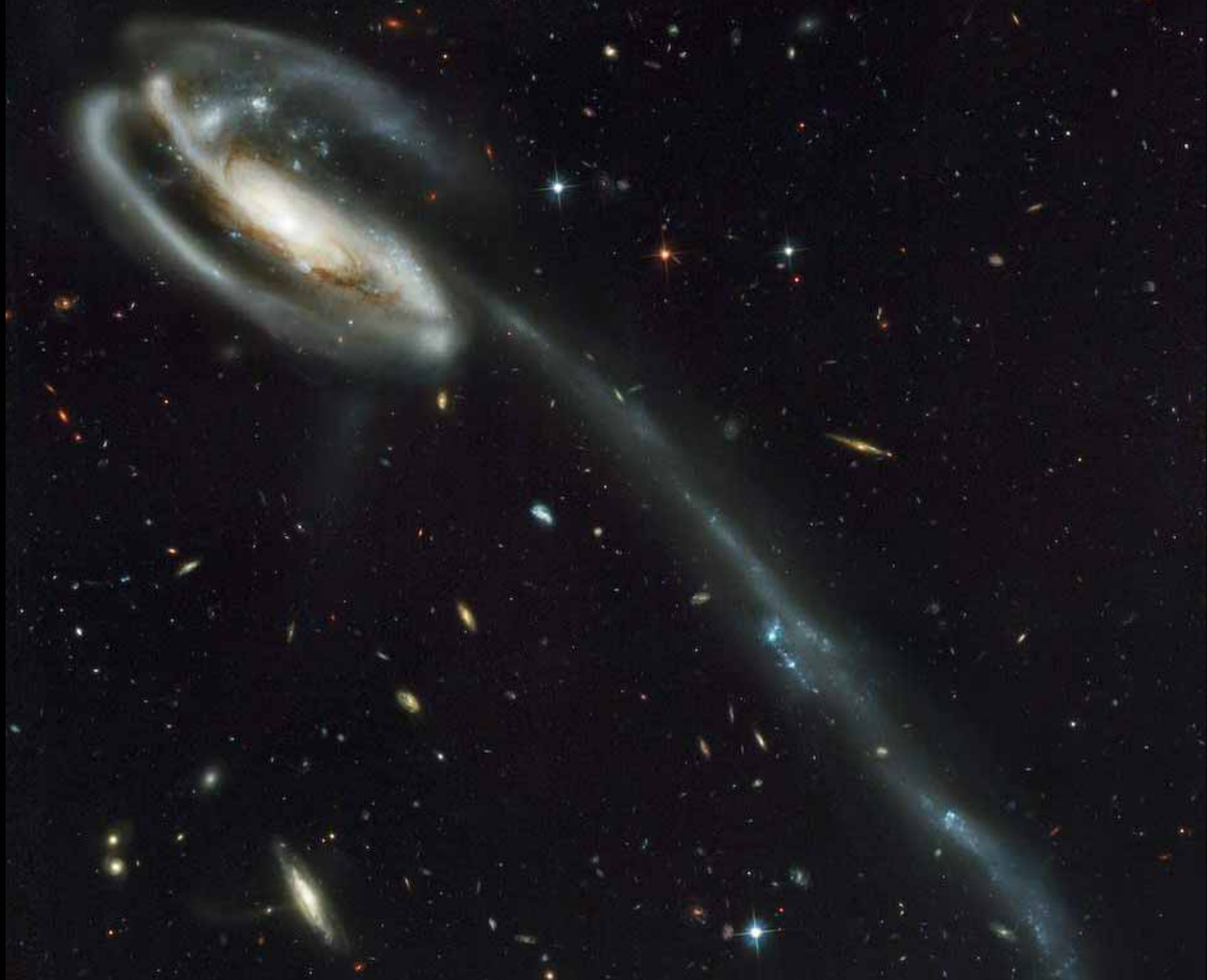


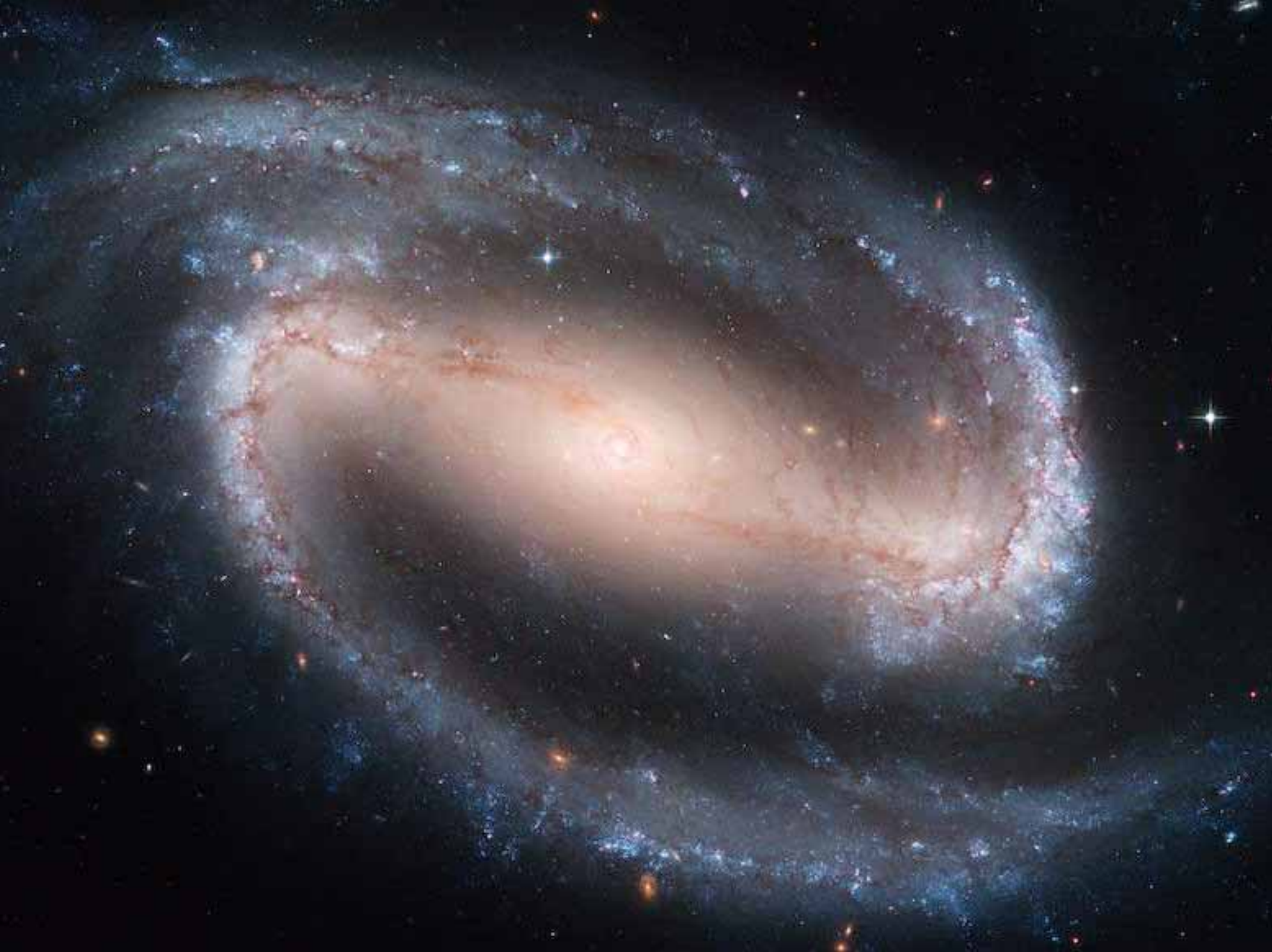














I LOVE THESE SUMMER EVENING REALITY CHECKS FROM OLIVER!

HOLD OUT A SPECK OF SAND AT ARM'S LENGTH...

THAT'S THE PORTION OF THE NIGHT SKY AT WHICH THEY POINTED THE HUBBLE TELESCOPE FOR A WEEK.

IT WAS THERE-- DEEP WITHIN THAT DOT OF DARK NOTHINGNESS TEN BILLION LIGHT YEARS DISTANT-- THAT THEY FOUND THE UNEXPECTED!



GALAXIES! THOUSANDS! THOUSANDS!



...WITH BILLIONS OF STARS!
... AND TRILLIONS OF NEW WORLDS.
AND BEYOND THOSE... MORE!



ALL IN THE SPACE OF A SINGLE GRAIN OF SAND ON THE VAST BEACH OF THE COSMOS.



WHICH NICELY FRAMES THE QUESTION MAN HAS BEEN ASKING FOR MILLENNIA.

WHAT QUESTION?



WHAT'S THE CENTER OF IT ALL?

ME.

ME, BABY.