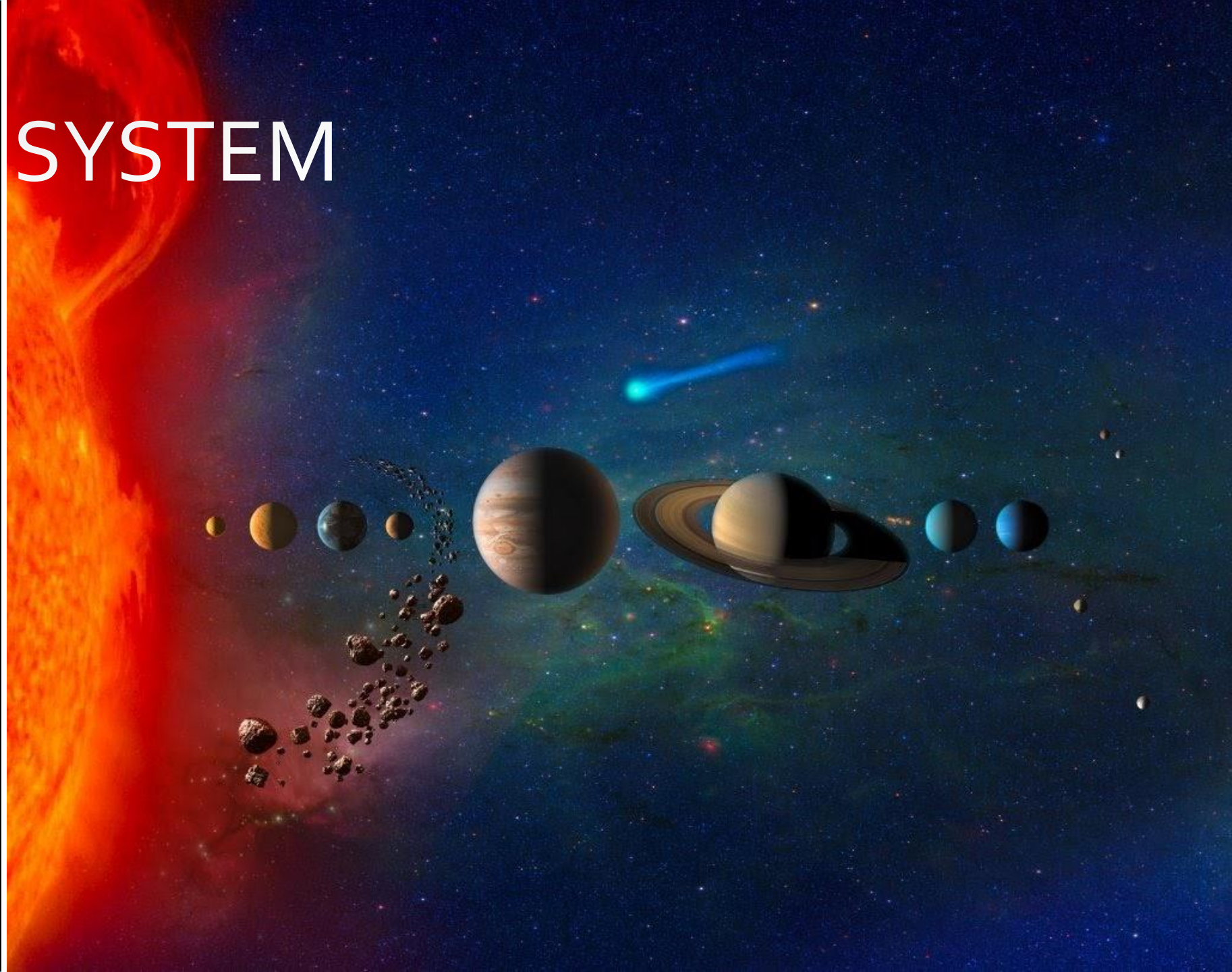


Characteristics of our solar system that allows

LIFE TO EXIST

OUR SOLAR SYSTEM

- 8 Planets
- 5 Dwarf Planets
- 1 Sun
- 146 moons
- Numerous asteroids and comets
- 1 planet that sustains life



THE GOLDBLOCKS ZONE

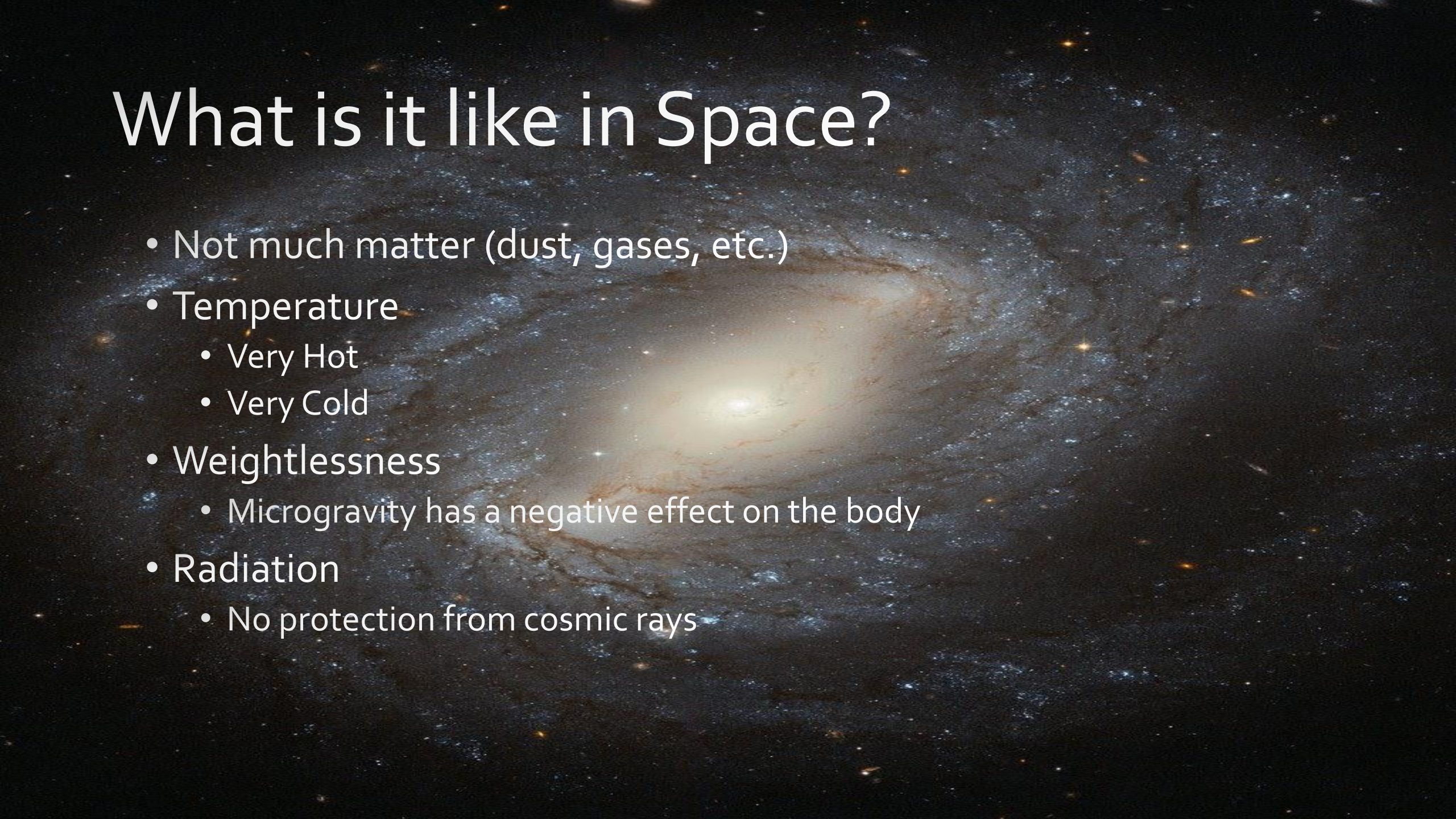
- Once upon a time there was a little girl who wandered into the woods. She came upon a house. The house where the 3 bears lived. She knocked on the door, but no one answered, so she let herself in. She found 3 bowls of porridge on the table. At first she tried papa bear's porridge but it was too hot, then she tried mama bear's porridge, but it was too cold. Finally she tried baby bear's porridge and it was just right.
- The Earth is in the "goldilocks zone" of our sun. Our orbital position is "just right" neither too hot or too cold for life to exist.
- Scientists are looking for other planets that may exist in the "goldilocks" zone of their sun.

What characteristics of the Earth allow life to exist?

- Water
- Organic compounds: Carbon, Oxygen, Nitrogen, Phosphorus, Sulfur, Hydrogen
- Temperate weather
- Atmosphere

What is it like in Space?

- Not much matter (dust, gases, etc.)
- Temperature
 - Very Hot
 - Very Cold
- Weightlessness
 - Microgravity has a negative effect on the body
- Radiation
 - No protection from cosmic rays



What would you need to take to space?

- Food
 - Water
 - Shelter
 - Clothes
 - Fuel
 - Oxygen
-
- The Apollo missions lasted 6 days.
 - Shuttle missions and current Orion missions last up to 12 days.
 - The mission to mars will take 2 years just to get to the planet.

Fun Facts

- Why do space vehicles launch in Florida?
 - They launch in Florida because the rotation of the earth allows the vehicles to launch over the ocean without having to overcome the rotational force.
- How many mpg does the crawler average?
 - The crawler (the vehicle that takes the shuttles to the launch pad) gets 32 feet to the gallon.

