

A dramatic illustration of a volcanic landscape under a night sky. In the foreground, two dark, jagged volcanic peaks are visible, with one on the right showing a bright orange and red lava flow. The sky is dark blue with white clouds. A large, glowing pinkish-white orb, possibly a full moon or a distant planet, is in the upper left. Several bright yellow and orange streaks, representing meteors or comets, are falling from the sky. The text is overlaid in a bold, yellow, italicized font.

***Origins:  
Is It Reasonable To  
Believe in God in  
This Scientific Age?***



# Belief in God:

*Is It Reasonable In This Scientific Age?*

- **Rom. 1:20** - His invisible attributes ... understood by the things that are made
  - His Eternal Power
  - His Divine Nature (Godhead)
- **Argument from Design**

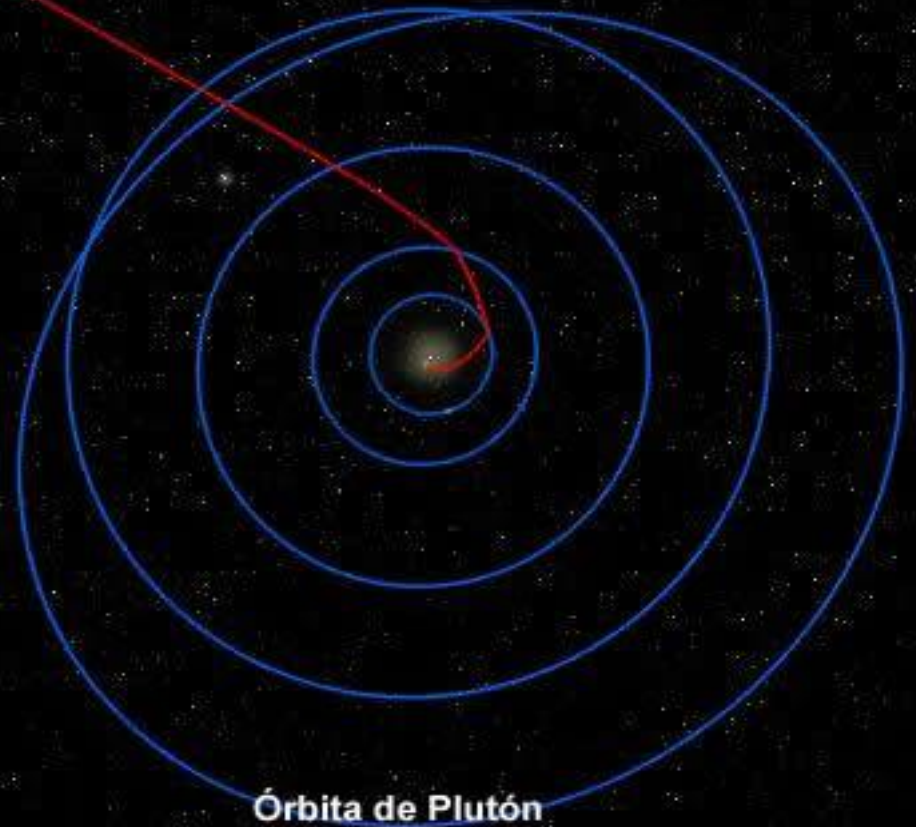


***Design at the  
Macroscopic Level:  
The Rare Earth***



# Voyager 1 Projected Flight Path

← Voyager 1



# ***The Pale Blue Dot***

by Carl Sagan



# *The Drake Equation*

$$N = N_s f_s f_p n_e f_l f_i f_c F_L$$

$N$  = number of communicating civilizations in our Galaxy right now

$N_s$  = number of stars in the galaxy ( $2 \times 10^{11}$ )

$f_s$  = fraction of stars suitable for life (0.05-0.3) [ $1 \times 10^{10}$  -  $6 \times 10^{11}$ ]

$f_p$  = fraction of suitable stars with planets ( $\sim 0.1$ ) [ $1 \times 10^9$  -  $6 \times 10^{10}$ ]

$n_e$  = average number of habitable planets or moons per solar system (0.01-0.5)

[ $1 \times 10^7$  -  $3 \times 10^9$ ]

$f_l$  = fraction on which life develops (0.01 - 1.0) [ $1 \times 10^5$  -  $3 \times 10^9$ ]

$f_i$  = fraction on which intelligence develops (0.001-0.5) [100 -  $1.5 \times 10^9$ ]

$f_c$  = fraction which try to communicate ( $\sim 0.5$ ) [50 -  $7.5 \times 10^8$ ]

$F_L$  = fraction of the star's life during which communicative civilization lasts  
( $1 \times 10^{-8}$  -  $1 \times 10^{-3}$ )

$$5 \times 10^{-7} \leq N \leq 750,000$$



# ***Rare Earth***

Peter D. Ward & Donald Brownlee  
2004

**Why complex life is  
uncommon in the universe**





# ***The Privileged Planet***

Guillermo Gonzalez & Jay W. Richards  
2004

**How our place in the universe  
is designed for discovery**

**“...the very same rare properties that allow  
for our existence ... also provide the  
best overall setting to make discoveries  
about the world around us.”**





# ***God's Crime Scene***

**J. Wallace Warner**

**A cold case detective  
examines the evidence for  
divinely created universe**



# Design in the Universe

## ■ ***The Goldilocks Enigma: Why is the Universe Just Right for Life?*** Paul Davies, 2008

- “One of the most significant facts – arguably *the* most significant fact – about the universe is that we are part of it.” (*Goldilocks*, page 2)
- “Everyone agrees that the universe *looks* as if it was designed for life.” (*Goldilocks*, page 191)
- “It looks as if our universe is spectacularly ‘fine-tuned for Life.’ By this I mean only that it *looks* as if small changes in this universe’s basic features would have made life’s evolution impossible.” (*Universes*, J. Leslie, 1996, page 2)



# Design in the Universe

## ■ The Anthropic Principle

□ In the 1960's, scientists had discovered:

■ **2** characteristics of the **cosmos** “fine-tuned” to make physical life possible

■ **8-10** characteristics of the **solar system** “fine-tuned” for human life to be possible

□ By the 2000's, scientists had discovered:

■ **38** characteristics of the **cosmos** recognized as “fine-tuned” for physical life.

■ **Over 150** characteristics of the **solar system** “fine-tuned” for human life to be possible



# Design in the Universe

- **Foundational “fine-tuned” factors to support life – “Just right!”**
  - **Strong Nuclear Force**
  - **Weak Nuclear Force**
  - **Electromagnetic Force**
  - **Gravitational Force**
  - **Ratio of electrons to protons (# and mass)**
  - **Mass density of the universe**



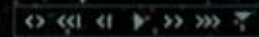


# Design in the Universe

- Regional “fine-tuned” factors to support life – “Just right!”
  - Proper type of galaxy

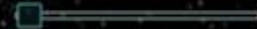
# Hubble

8 Apr 2008  
06:23:08 GMT+2  
Rate: 1x

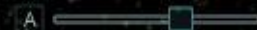


Set Time

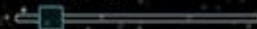
Ambient Light Level: 0,00



Magnitude limit: 9,90



Galaxy Light Gain: 10%



Set Render Options

Solar System Browser

FOV: 34° 30' 31" (0,75x)



Measure

Distances

Cockpit

Compass





**A portion of the  
constellation Serpens**



# Types of Galaxies

**Elliptical galaxy**



**Irregular galaxy**

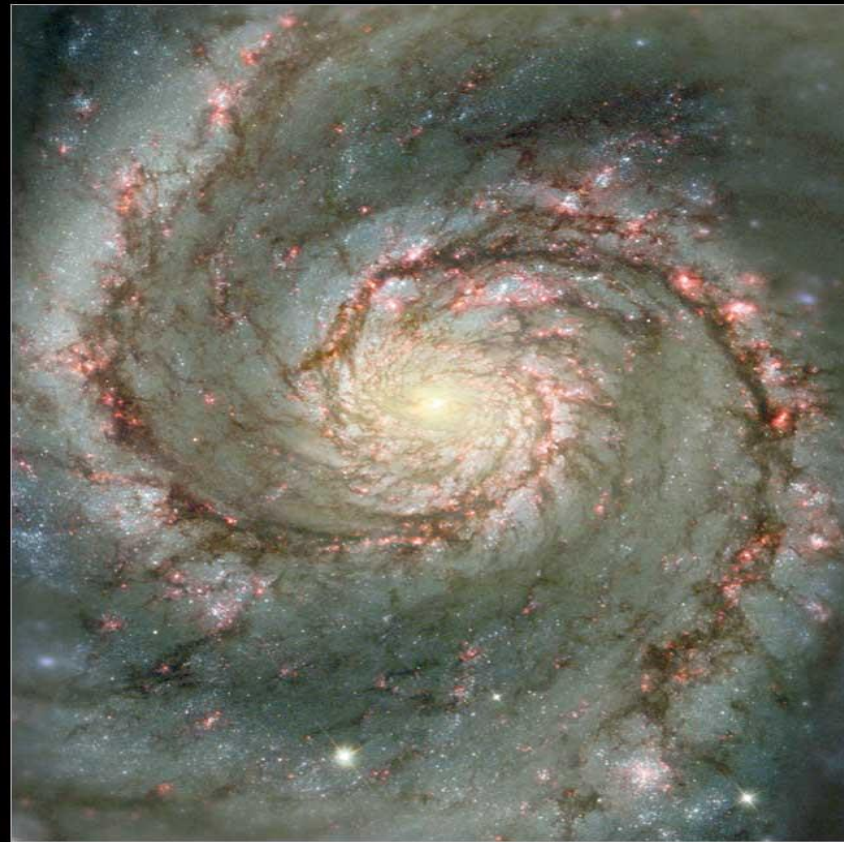




# Types of Galaxies

## Spiral galaxy

Whirlpool Galaxy • M51



Hubble  
Heritage

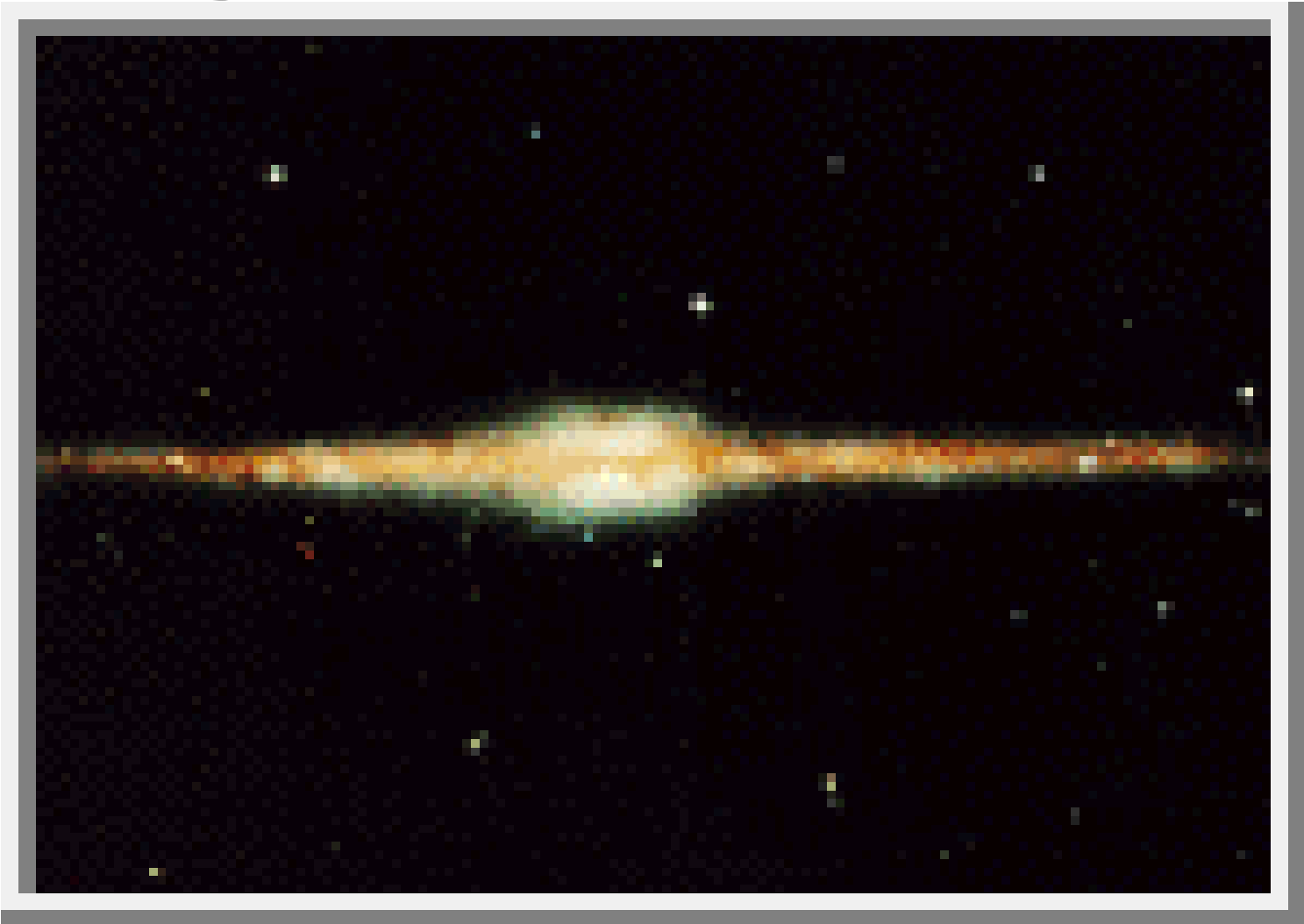
NASA and The Hubble Heritage Team (STScI/AURA)  
Hubble Space Telescope WFPC2 • STScI-PRC01-07



# Design in the Universe

- **Regional “fine-tuned” factors to support life – “Just right!”**
  - **Proper type of galaxy**
  - **Proper place in the galaxy**

# Design in the Universe





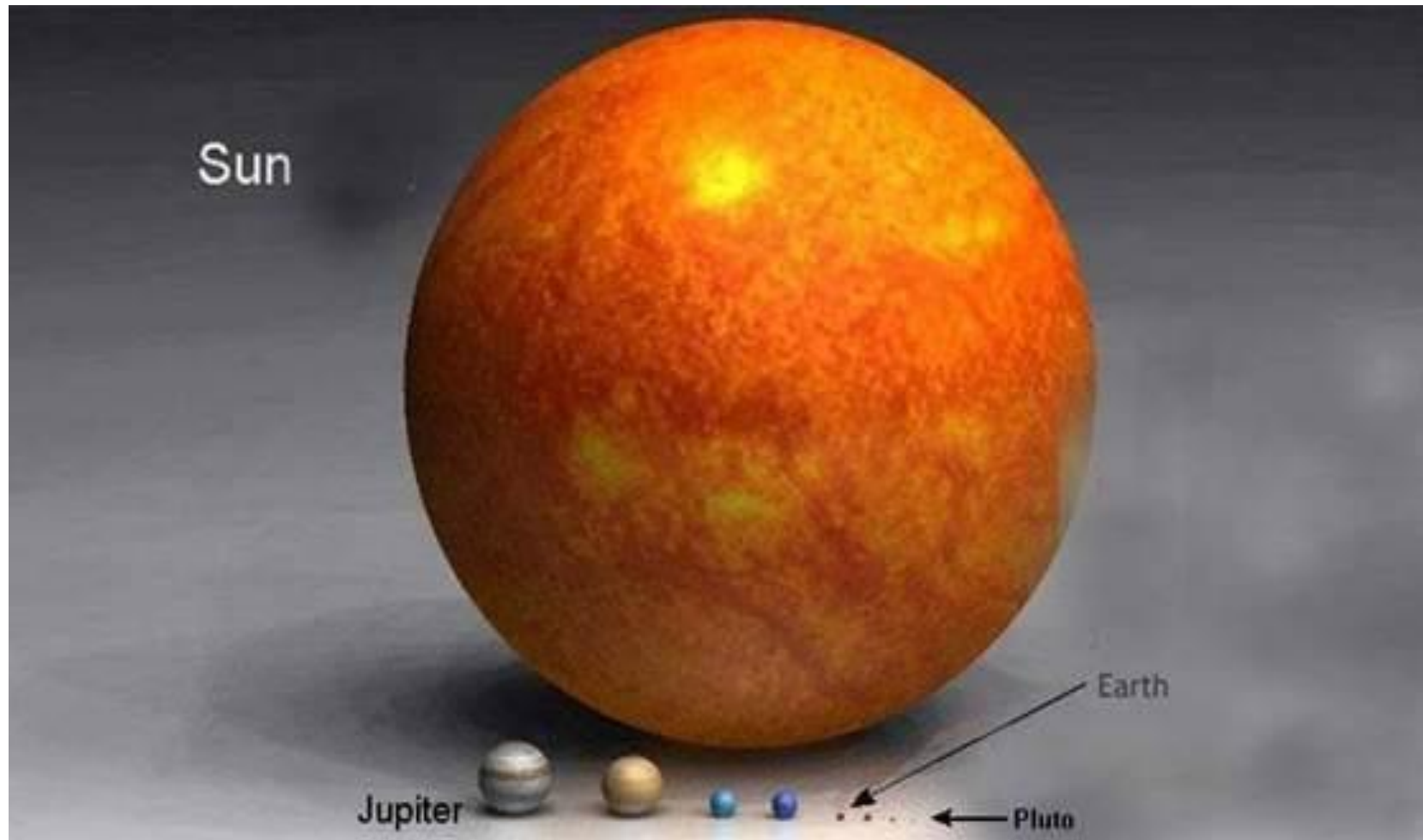
# Design in the Universe

- **Regional “fine-tuned” factors to support life – “Just right!”**

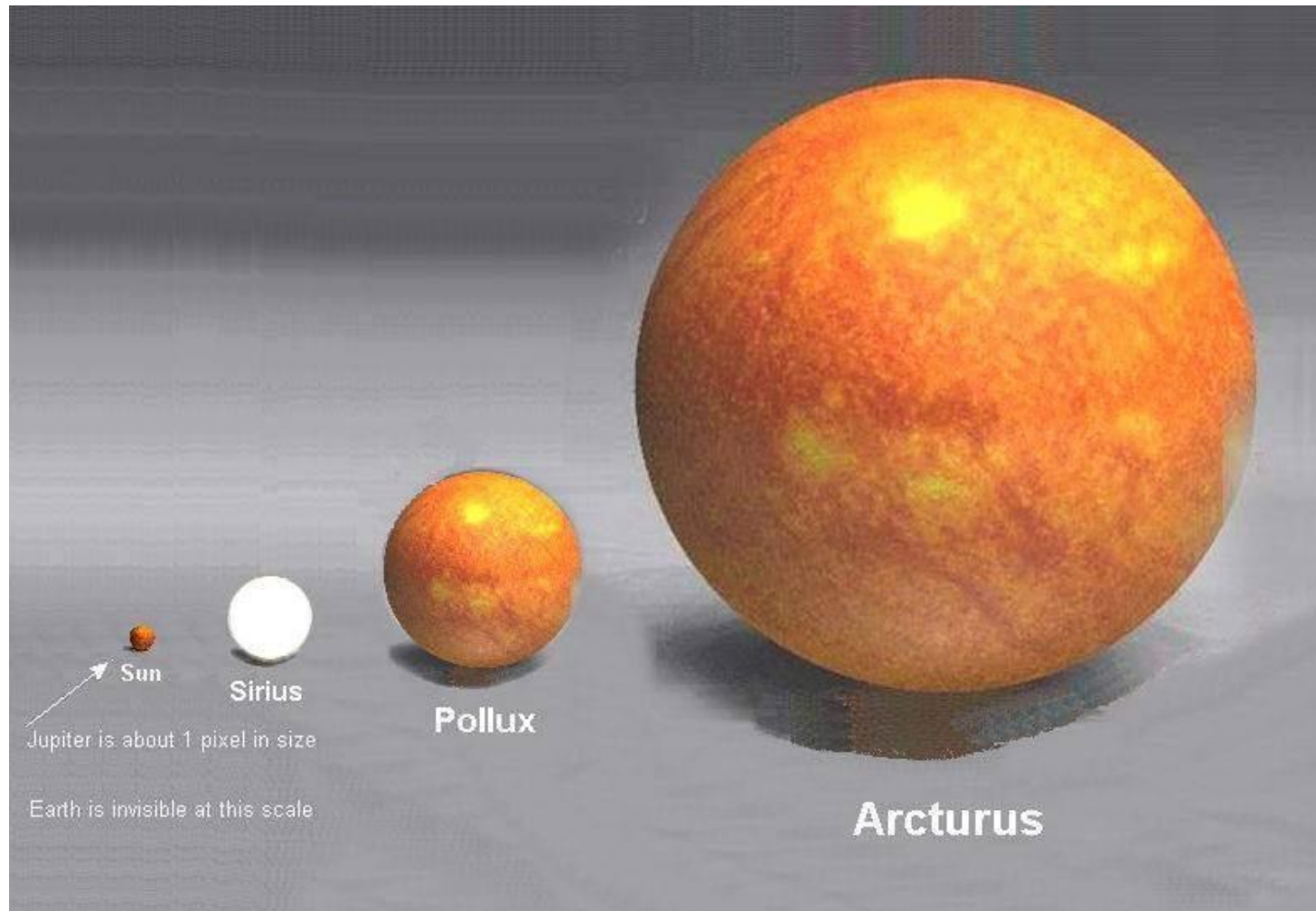
- ☐ Proper type of galaxy
- ☐ Proper place in the galaxy
- ☐ **Proper kind of star (Our Sun)**



# Design in the Universe



# Design in the Universe



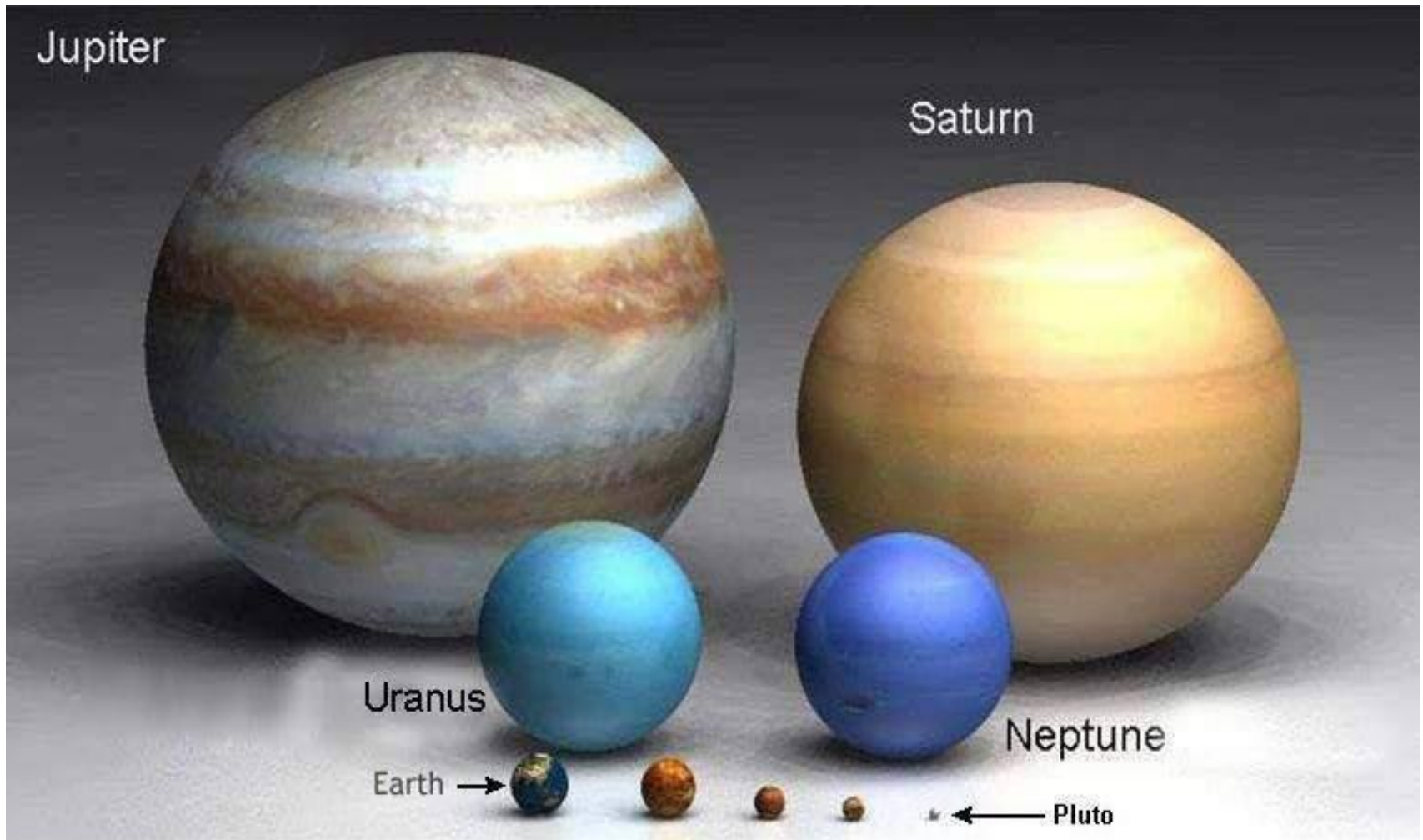


# Design in the Universe

- **Regional “fine-tuned” factors to support life – “Just right!”**

- ☐ Proper type of galaxy
- ☐ Proper place in the galaxy
- ☐ Proper kind of star (Our Sun)
- ☐ **Proper mass of our planet**

# Design in the Universe



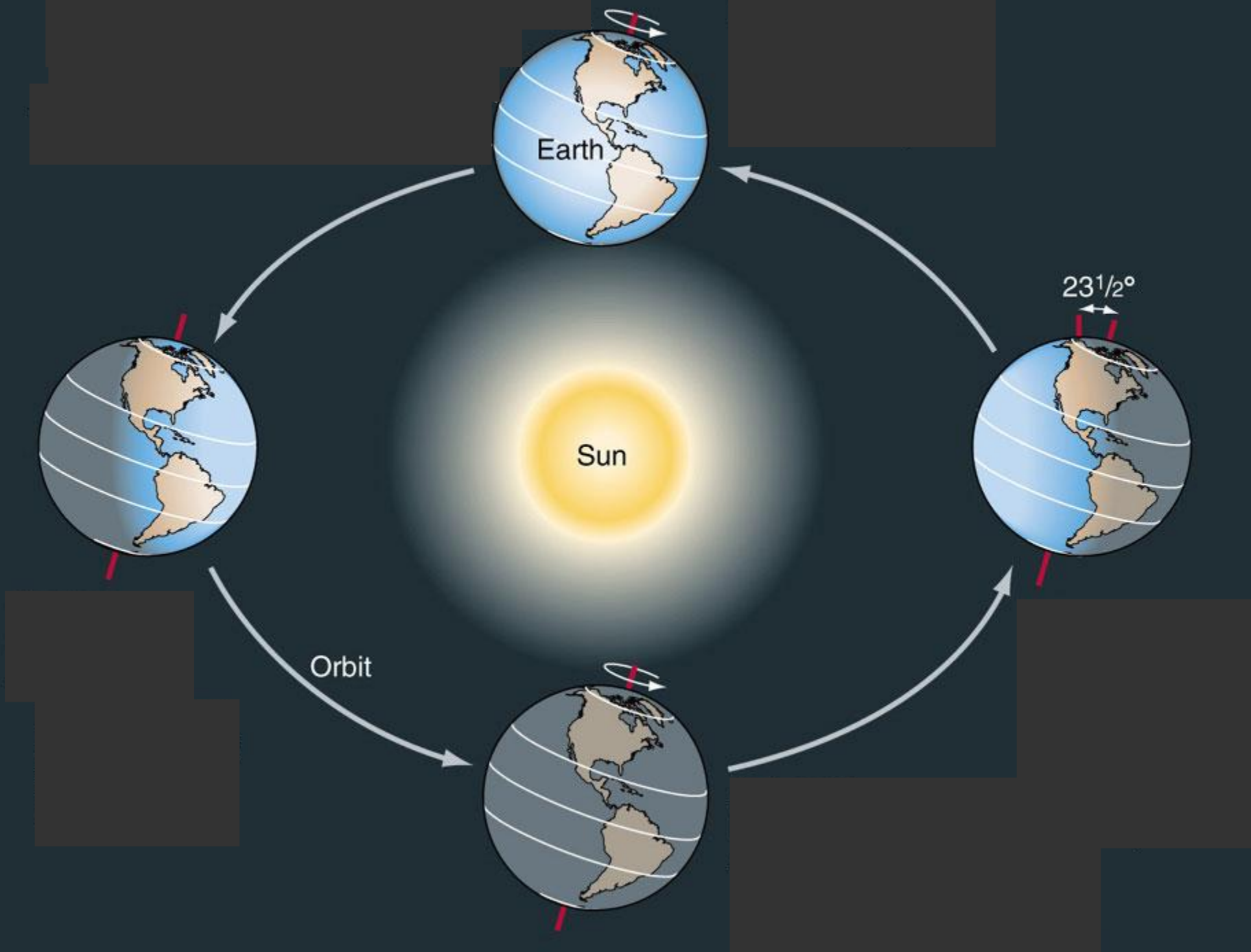




# Design in the Universe

- **Locational “fine-tuned” factors to support life**

- ☐ **Just the right distance from the Sun**
- ☐ **Just the right spin**
- ☐ **Just the right tilt**





# Design in the Universe

## ■ Locational “fine-tuned” factors to support life

- ☐ Just the right distance from the Sun
- ☐ Just the right spin
- ☐ Just the right tilt
- ☐ **Just the right Moon**
- ☐ **Just the right atmospheric conditions**
- ☐ **Just the right terrestrial crust**
- ☐ **140 MORE!!!**



# Design in the Universe

## ■ WATER!!!

- Covers more than 70% of the Earth's surface
- Most plants and animals contain more than 60% water by volume

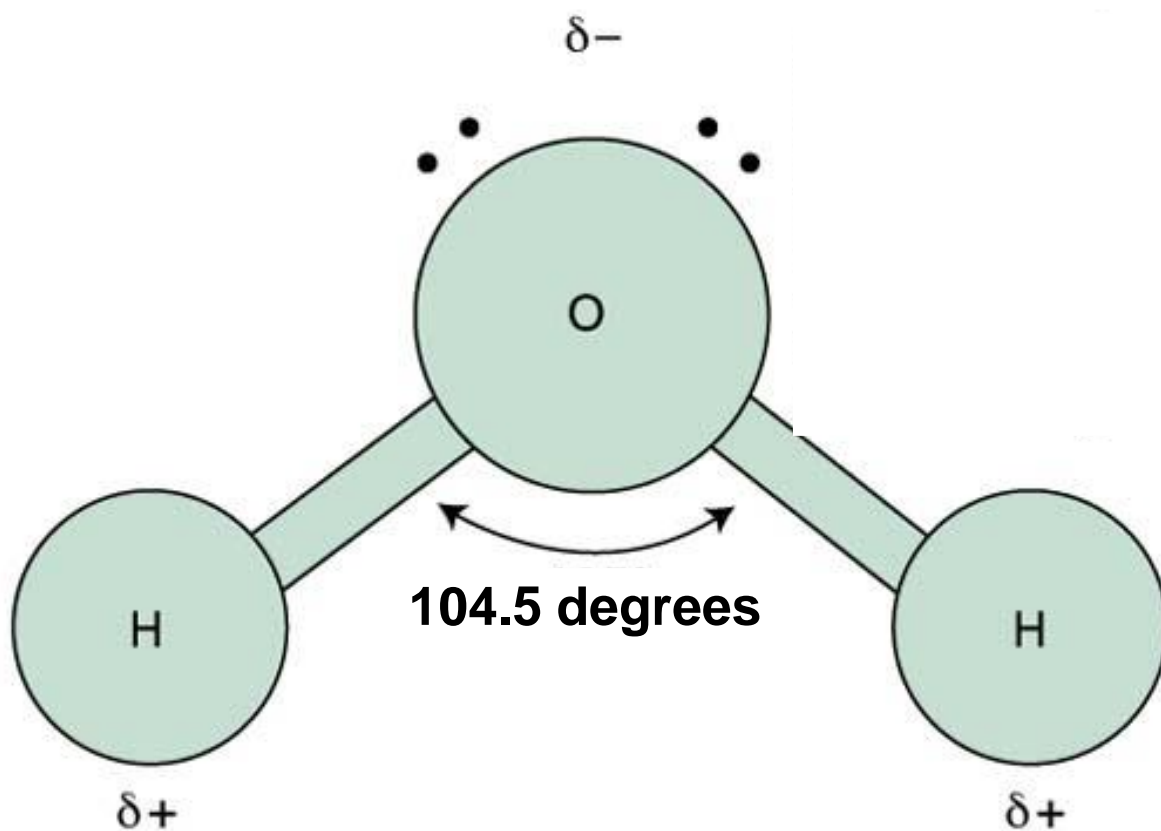


# Design in the Universe

- **WATER!!!**

- **A unique structure**

## Unique Structure of a Water Molecule







# Design in the Universe

## ■ WATER!!!

- A unique structure
- Only substance on Earth that exists in all three states: solid, liquid and gas
- Uniquely high specific heat



# Design in the Universe

## ■ WATER!!!

- Wide temperature range for liquid (0 – 100 degrees C)
- Less dense as a solid!!
- Universal solvent
- High surface tension, cohesion and adhesion

# Is It Reasonable to Believe in God in this Scientific Age?

- **Everywhere we look, from the macroscopic to the microscopic things look like they are MADE**
- **A loud, clear, piercing cry of DESIGN!!**

(M. Behe, Darwin's Black Box)



**Is It Reasonable to Believe in  
God in this Scientific Age?**

**It is more  
reasonable  
than ever!!!**

# Our God, He Is Alive!

*Is It Reasonable to Believe in God in this  
Age of Enlightenment?*

## ■ John 14:1-6

- ☐ “If you believe in God, believe also in Me ...”
- ☐ “I go to prepare a place for you ...”
- ☐ “I am the way, the truth, and the life. No man comes to the Father but by Me.”