

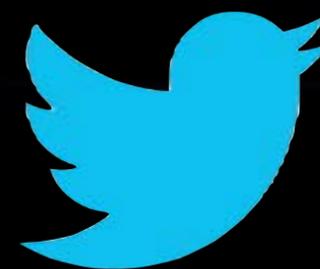


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\*Standard messaging rates apply.

**“Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect.”**

**1 Peter 3:15**



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# PONDERING THE COSMOS

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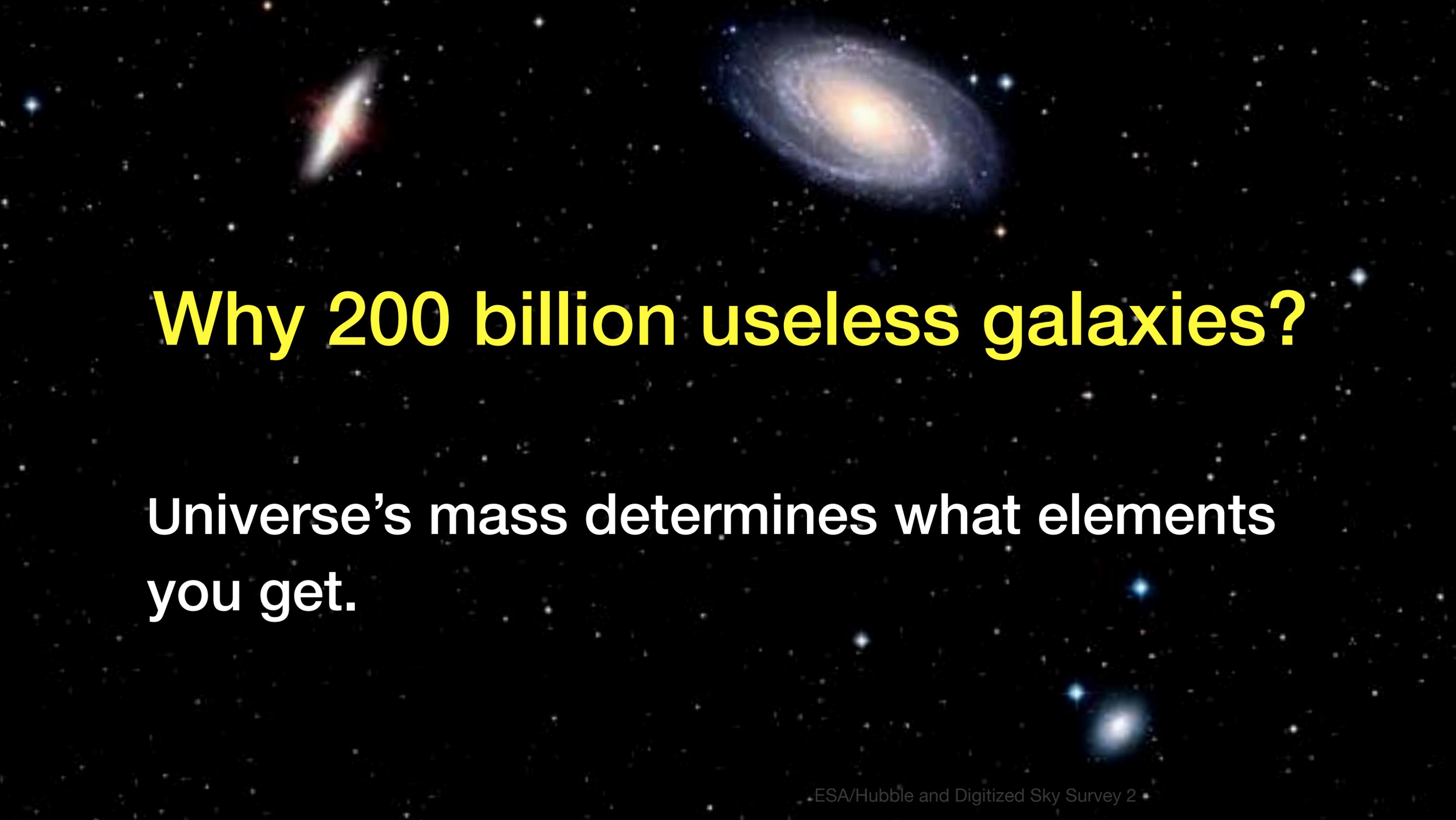
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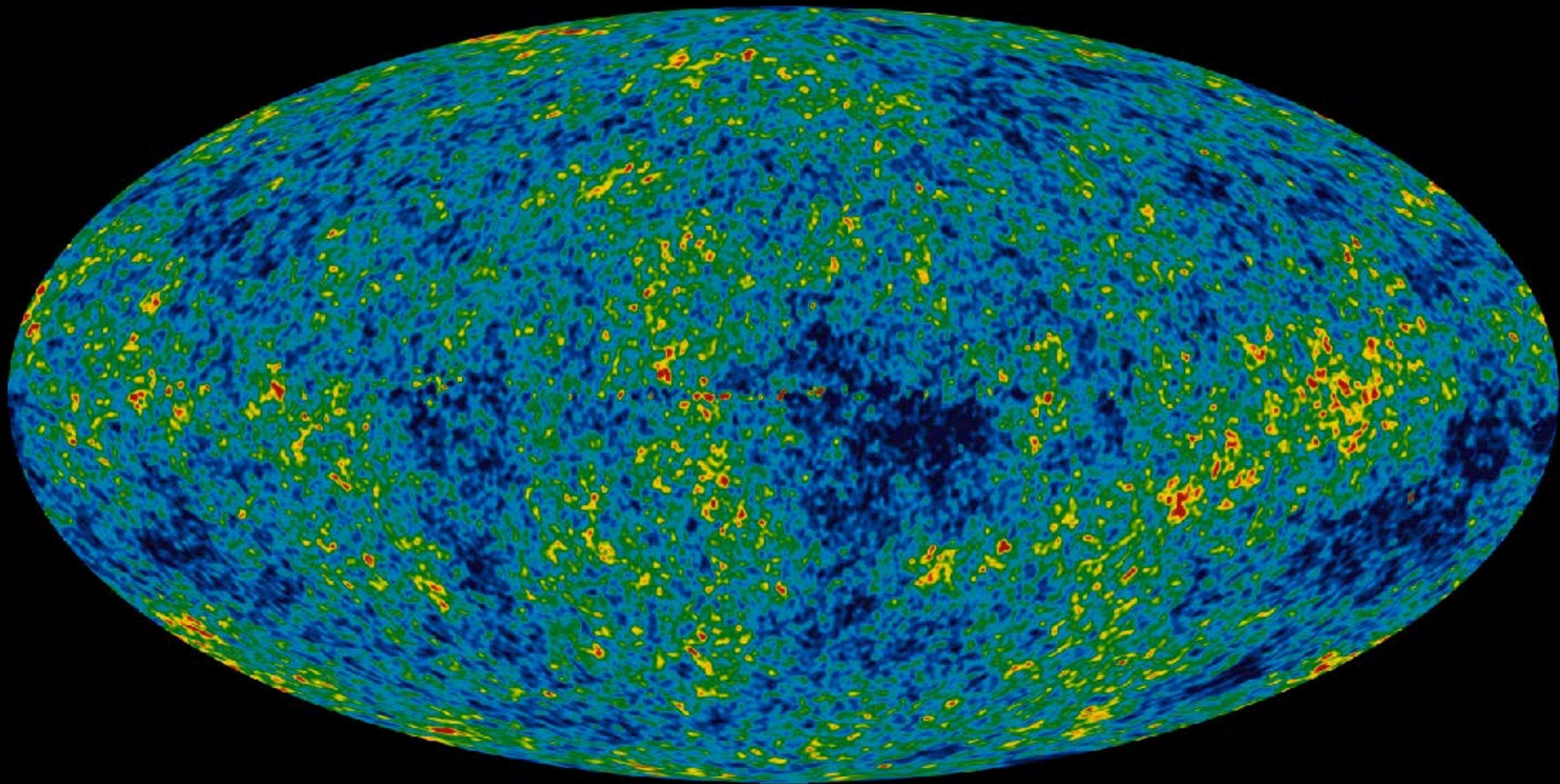
# PONDERING THE COSMOS

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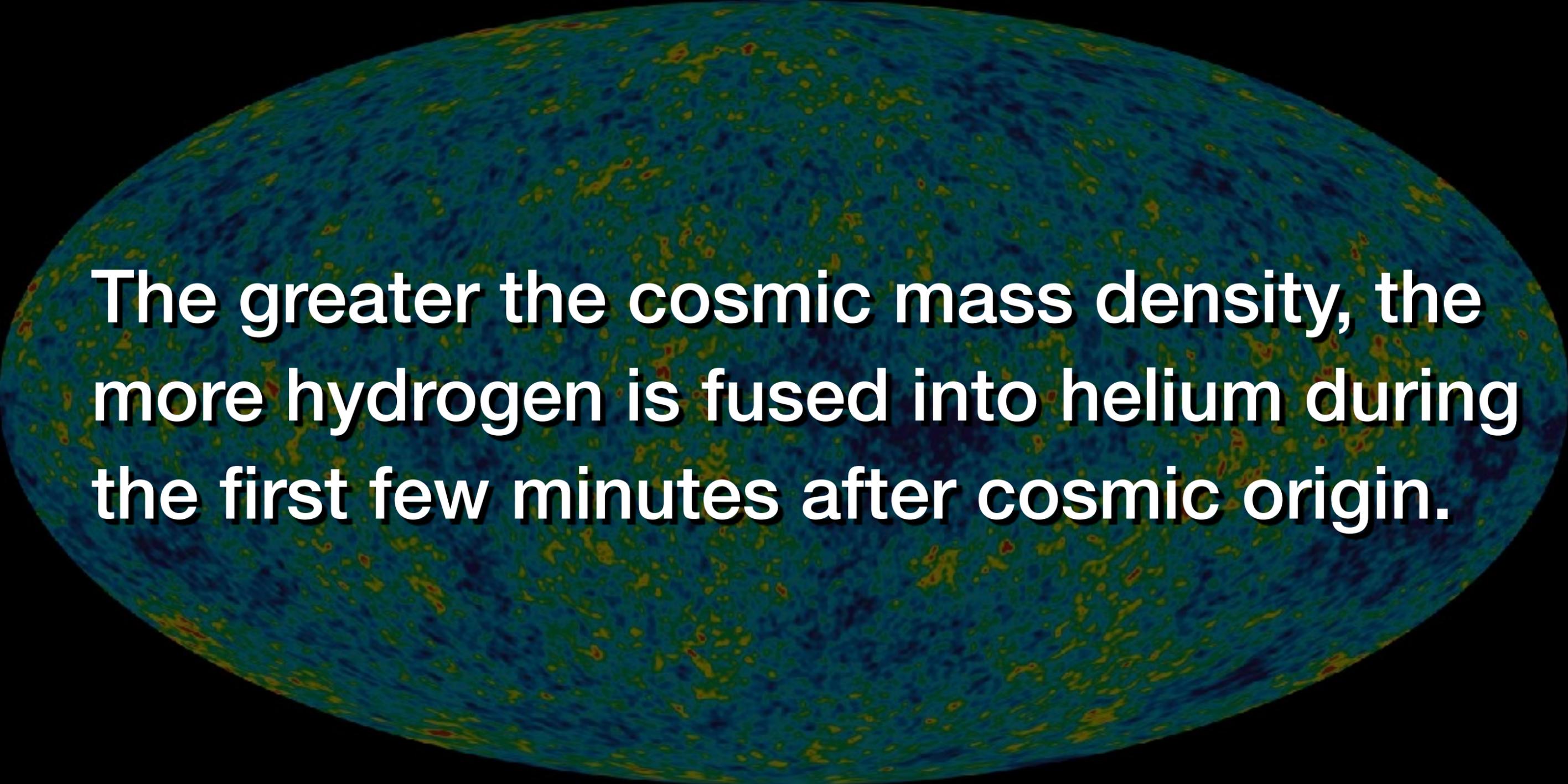
The background of the slide is a deep space image filled with stars. Two prominent galaxies are visible: a red, elongated one on the left and a larger, blue, spiral one on the right. The text is overlaid on this background.

# Why 200 billion useless galaxies?

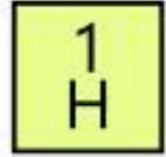
Universe's mass determines what elements  
you get.



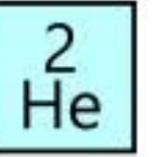
**text HUGH to 31996**



**The greater the cosmic mass density, the more hydrogen is fused into helium during the first few minutes after cosmic origin.**



# Table of Elements



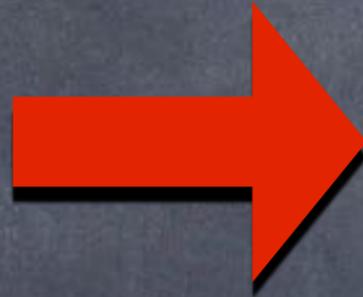


# Table of Elements

1 H																	2 He	
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne	
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar	
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr	
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe	
55 Cs	56 Ba	57 La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn	
87 Fr	88 Ra	89 Ac	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og	
			58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu		
			90 Th	91 Pa	92 U	93 Np	94 Pu											



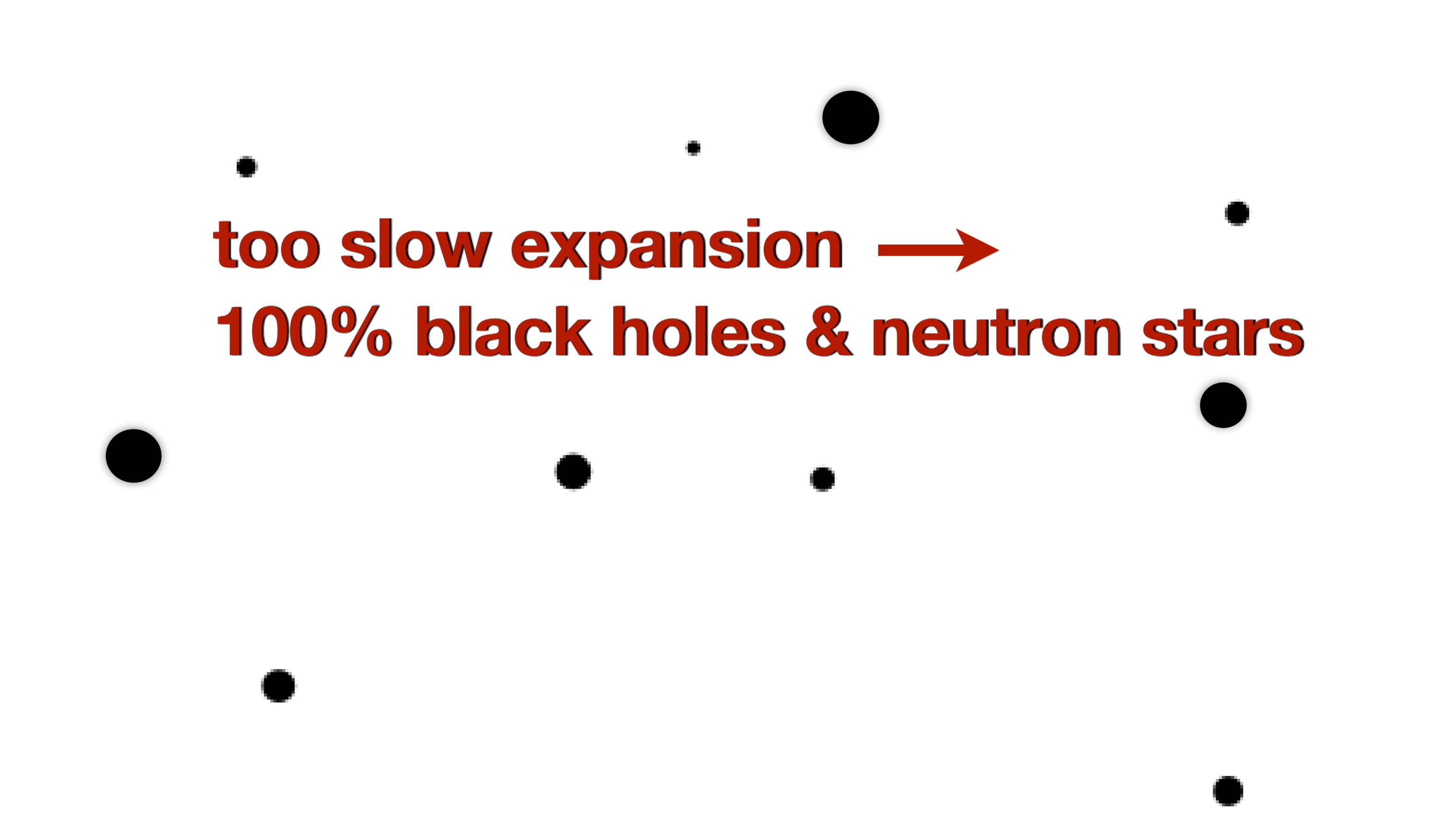
**12 billion light years**



**2 billion light years**

**Universe's mass also plays a role in determining the cosmic expansion rate.**

**too rapid expansion →**  
**100% diffuse gas**



**too slow expansion →  
100% black holes & neutron stars**



**just right expansion →  
stars and planets**

**text HUGH to 31996**

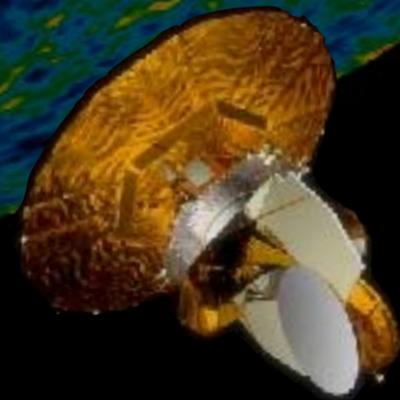
**If the cosmic mass density were the tiniest fraction greater or lesser, life is impossible anytime or anywhere in the universe.**



**Why is it so old?**

# Unique Time to Observe

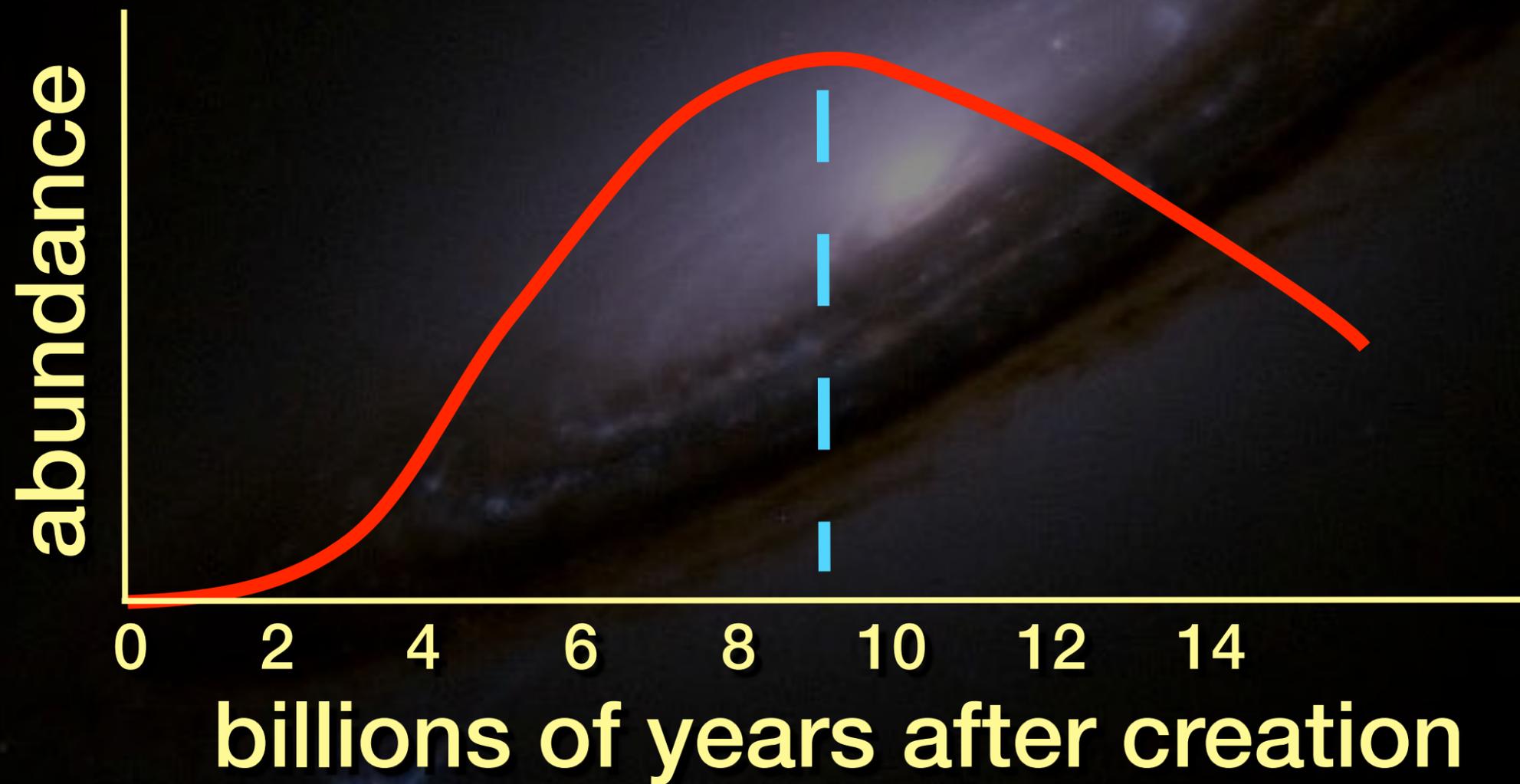
If we were created later—or earlier—we would be unable to witness the cosmic creation event.



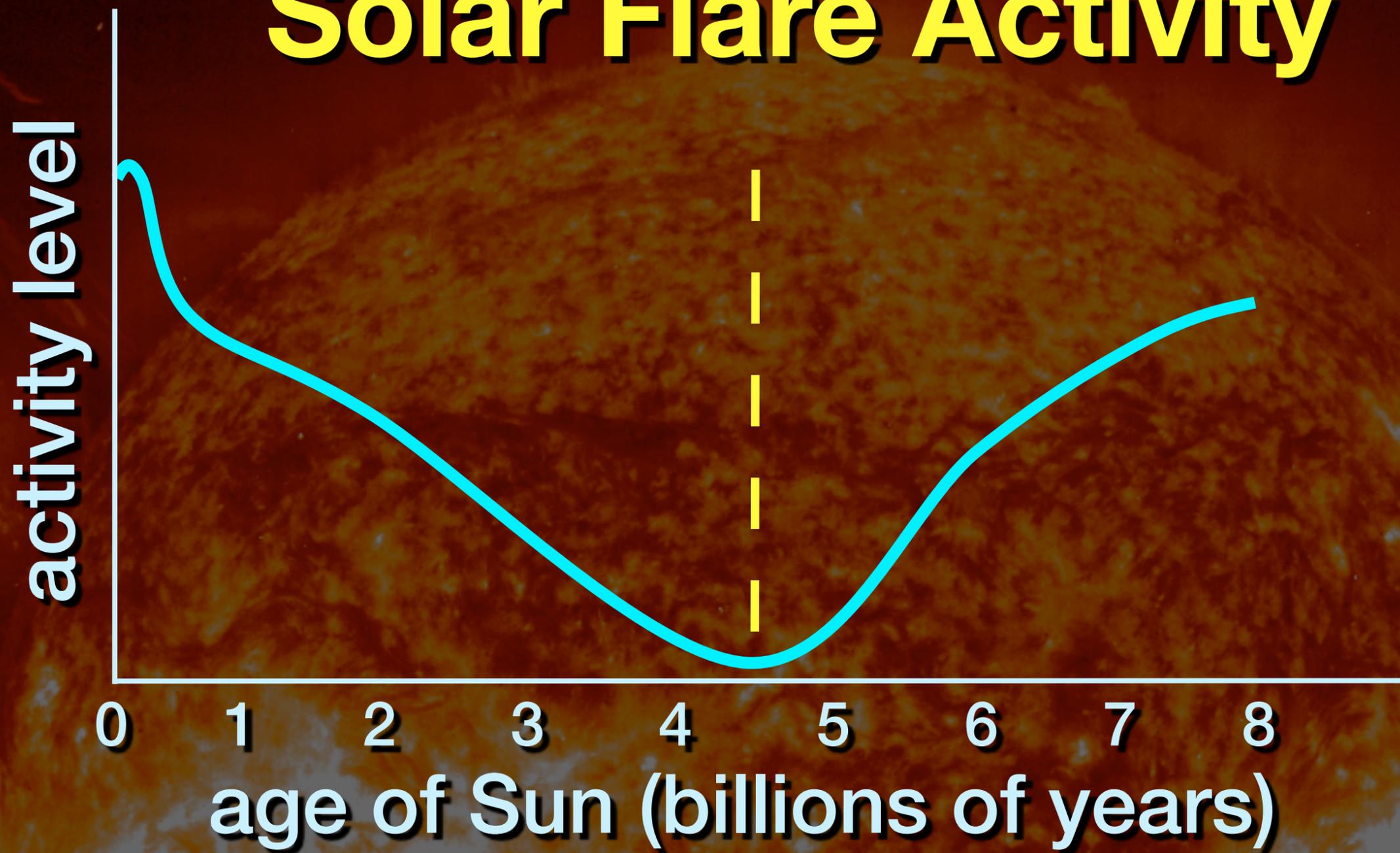
# Unique Time

Only at ~14 billion years after the cosmic creation event can humans observe all of cosmic history and directly witness the cosmic creation event.

# Uranium/Thorium Abundance



# Solar Flare Activity





**Why is the universe so dark?**

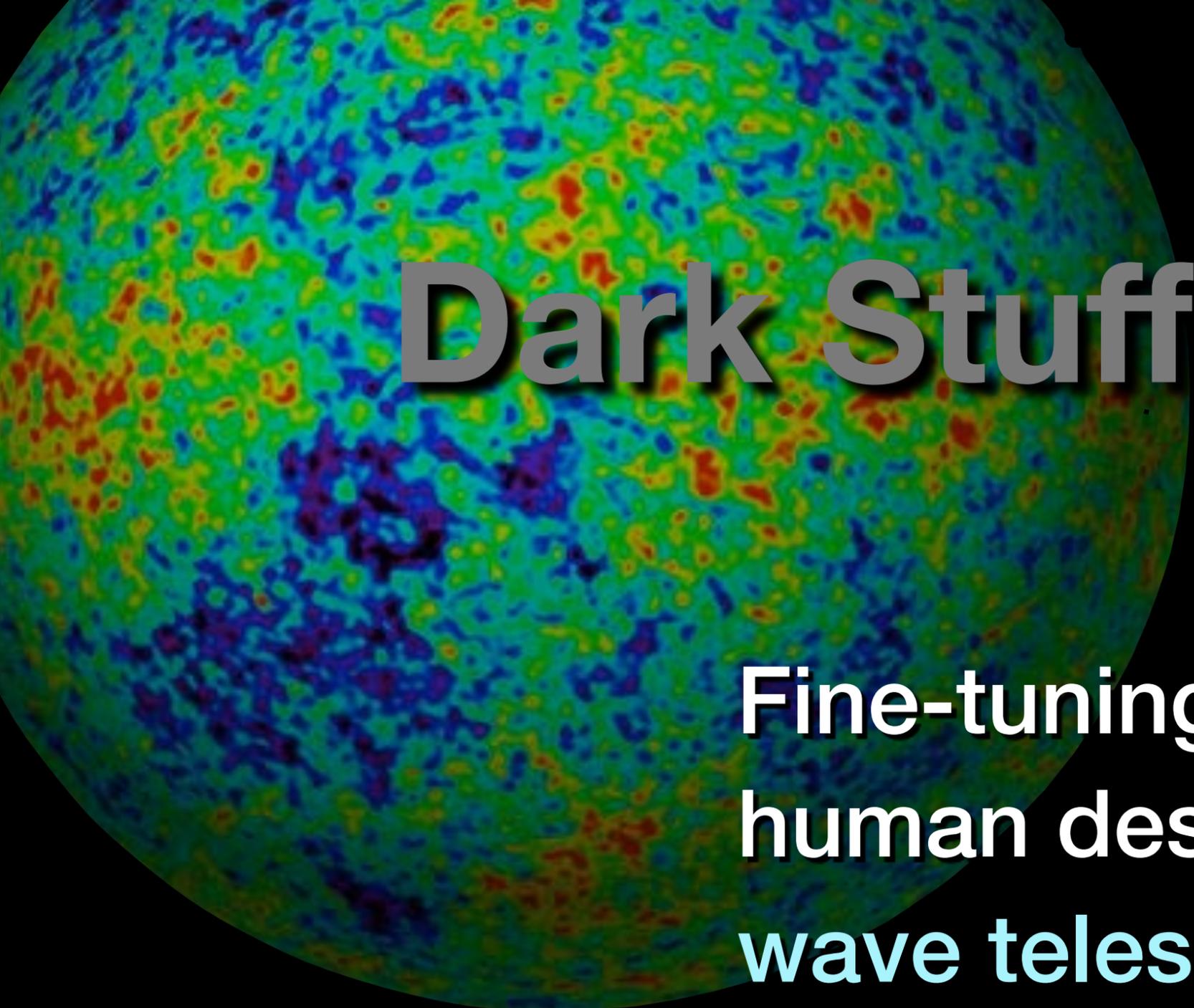
**text HUGH to 31996**

# Cosmic Inventory



# Why so dark?

If the dark stuff was altered by just one part in  $10^{122}$ , no life would be possible.

A Cosmic Microwave Background (CMB) fluctuation map, showing a complex pattern of temperature variations across the sky. The colors range from blue (cooler) to red (warmer), with a prominent blue region on the left and a red region on the right. The map is overlaid on a dark background.

# Dark Stuff

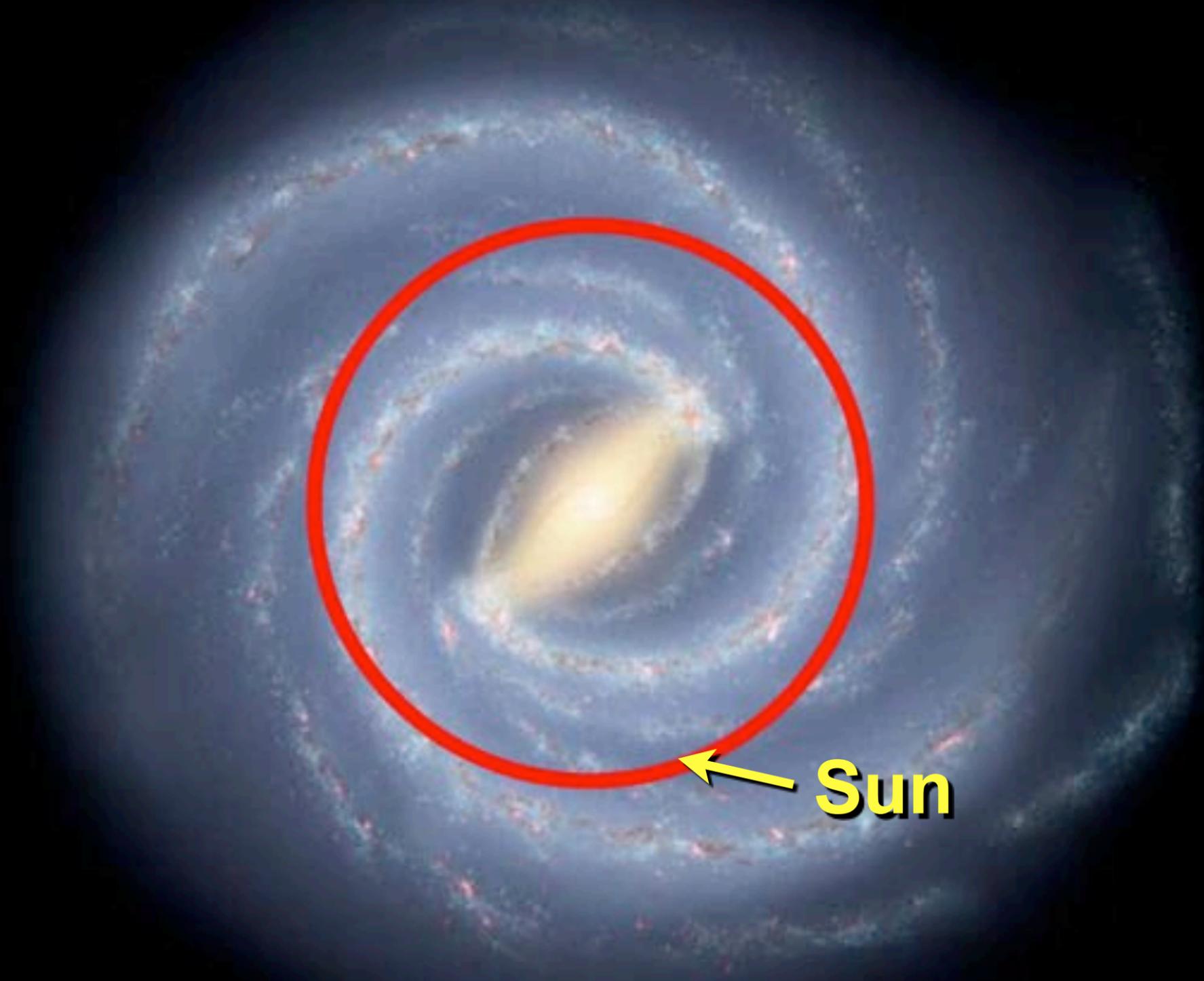
Fine-tuning exceeds the best human design success (gravity wave telescopes) by  $10^{97}$  times.

# Copernican Principle

A detailed image of a spiral galaxy, likely the Milky Way, showing its central bulge and numerous spiral arms. The galaxy is rendered in shades of blue, purple, and yellow. A yellow arrow points from the text 'Sun' to a specific location on one of the spiral arms, indicating the Sun's position relative to the galaxy's center.

← Sun

Earth is not in a central or especially favored position.



**Sun**

# Unique Location

far from the galactic core

A false-color image of a spiral galaxy, likely the Milky Way, showing a central yellowish core and several blue and red spiral arms. A yellow arrow points to a specific location in the outer spiral arms, labeled "Sun".

Sun

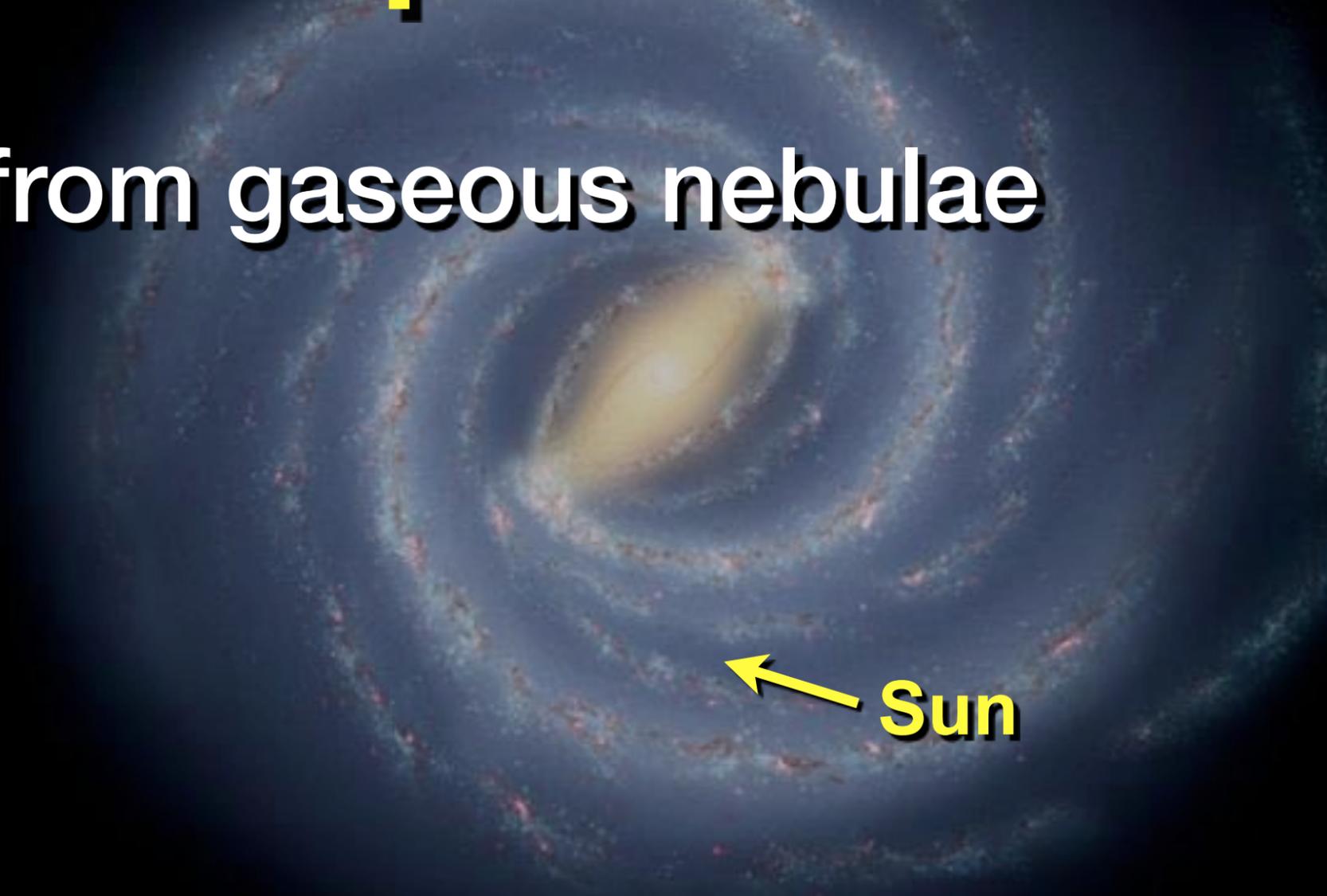
# Unique Location

far from spiral arms

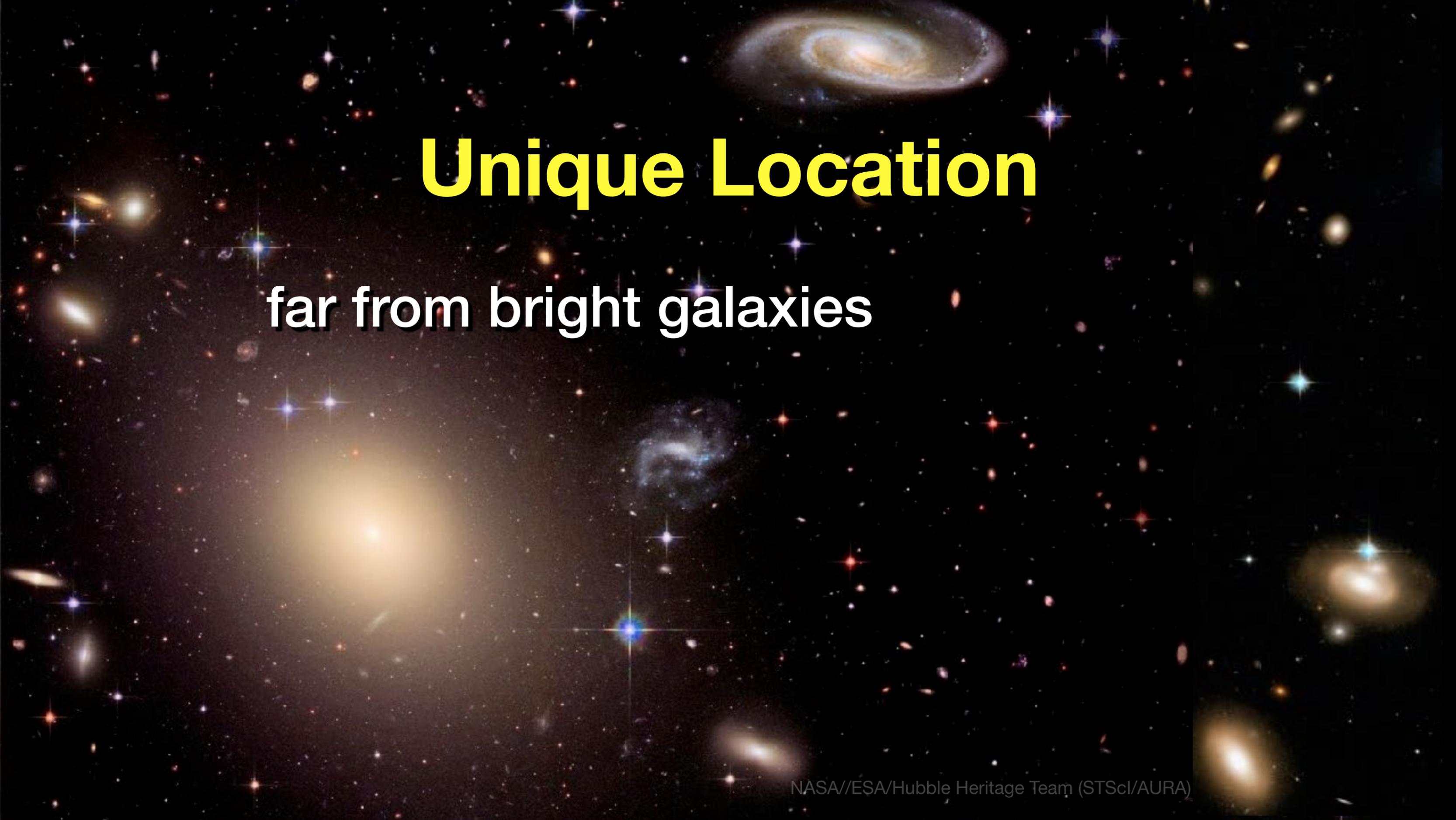
← Sun

# Unique Location

far from gaseous nebulae



Sun



# Unique Location

far from bright galaxies

**Why would your God  
subject us to so much  
decay?**

**text HUGH to 31996**

# Law of Decay Design

optimal for allowing formation of stars  
and planets that life requires

optimal for allowing plants to produce  
food and for animals to digest food

# Law of Decay Design

optimal for restraining evil

optimal for training humans for their  
future roles in the new creation

# Law of Decay Design

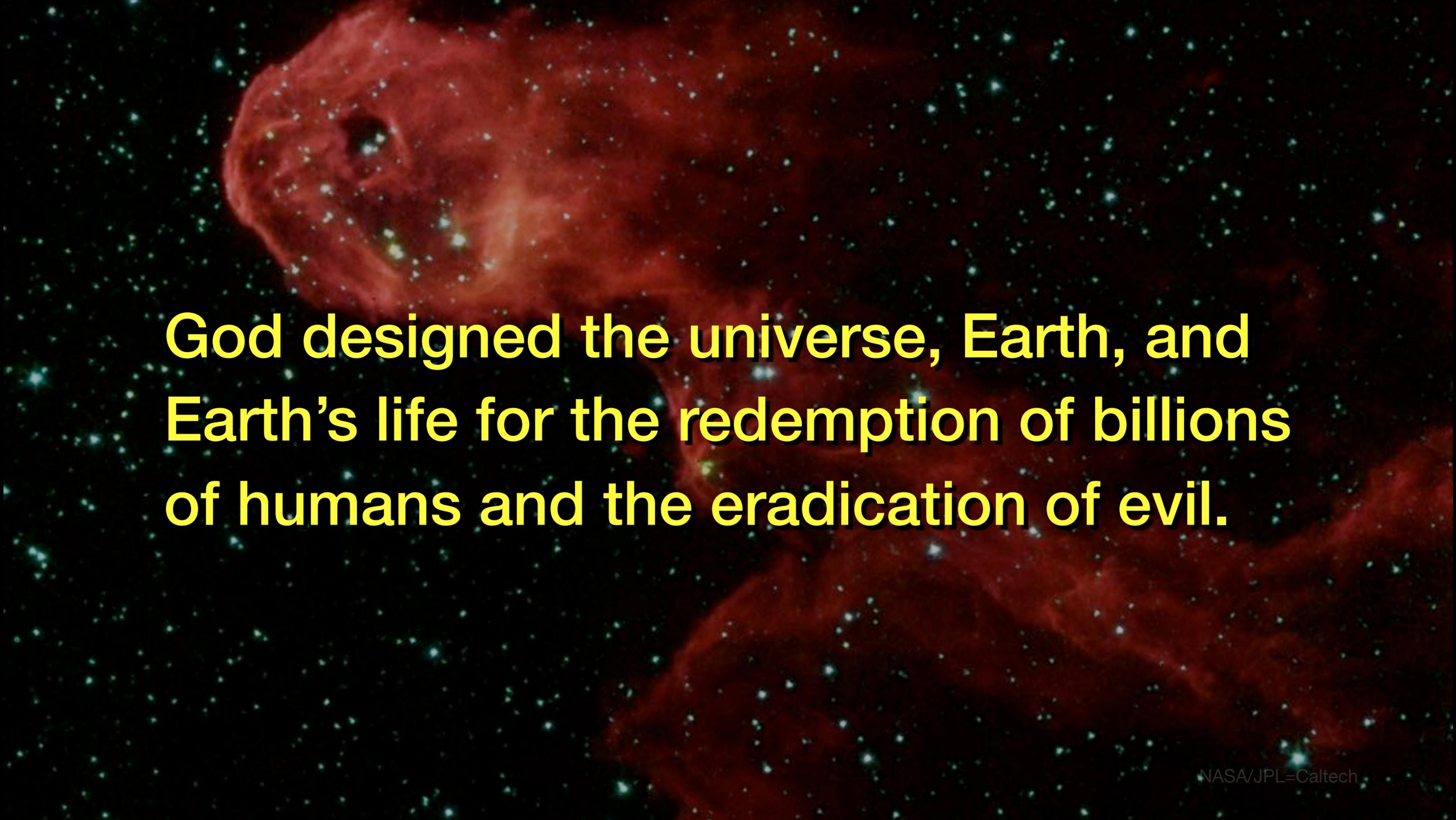
Decay rate is not so high as to discourage productive work.

Decay rate is not so low as to let human sin go unrestrained.

# Physical Laws' Purpose

to encourage avoidance of sin

**Because of the law of decay,**  
**sin leads to** **more pain,**  
**more work,**  
**more wasted time,**  
**to undo the damage caused by sin.**



**God designed the universe, Earth, and Earth's life for the redemption of billions of humans and the eradication of evil.**

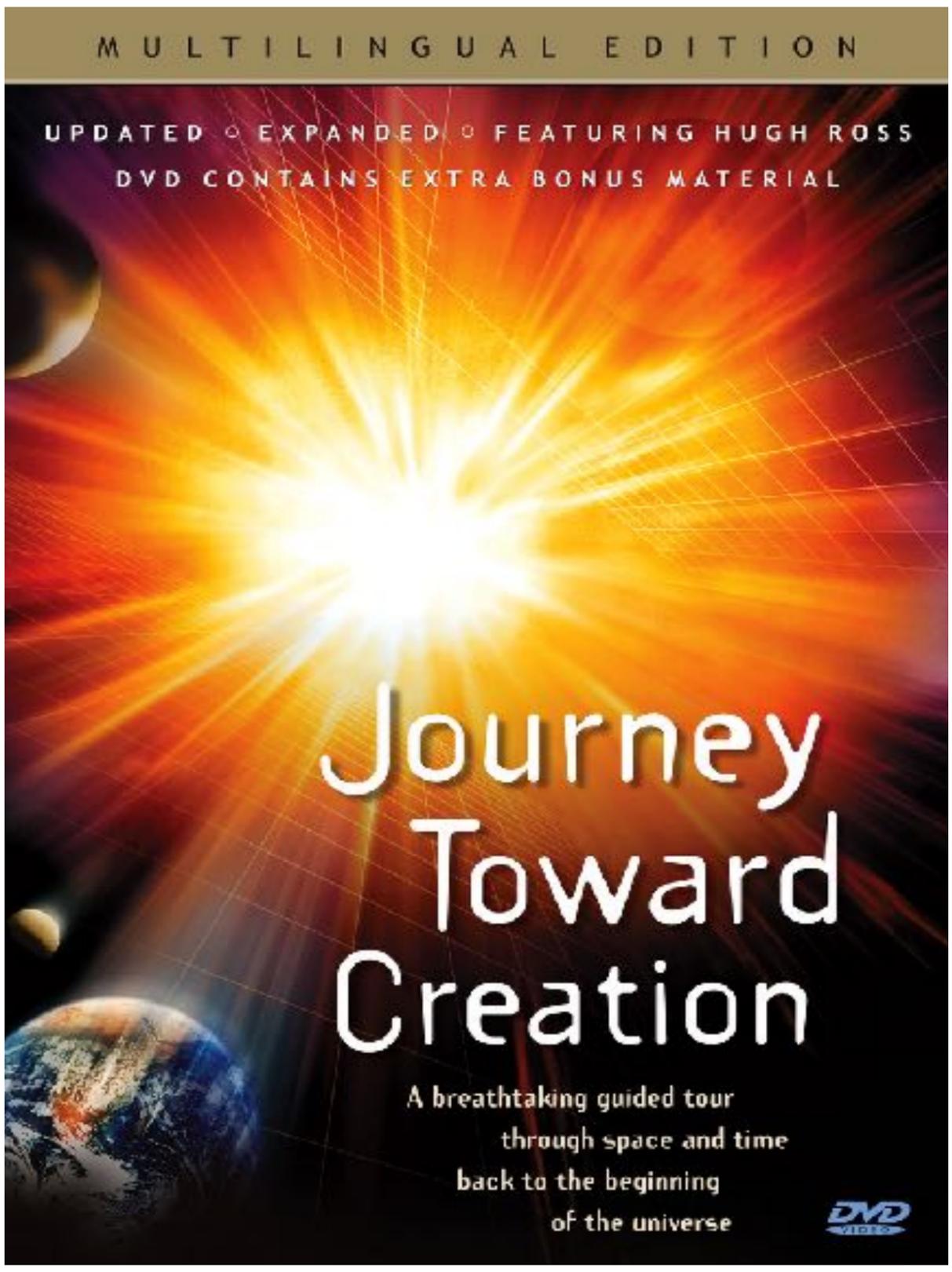
HUGH ROSS

WHY  
THE UNIVERSE  
IS THE WAY IT IS

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M U L T I L I N G U A L   E D I T I O N

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DVD CONTAINS EXTRA BONUS MATERIAL



# Journey Toward Creation

A breathtaking guided tour  
through space and time  
back to the beginning  
of the universe





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