

Project ISSACHAR

Training in
Apologetics and
Biblical Worldview

“Those who had
understanding of the
times, to know what Israel
ought to do...”

1 Chronicles 12:32



Outlines and other
resources...

ThinkingAboutTheBible.com

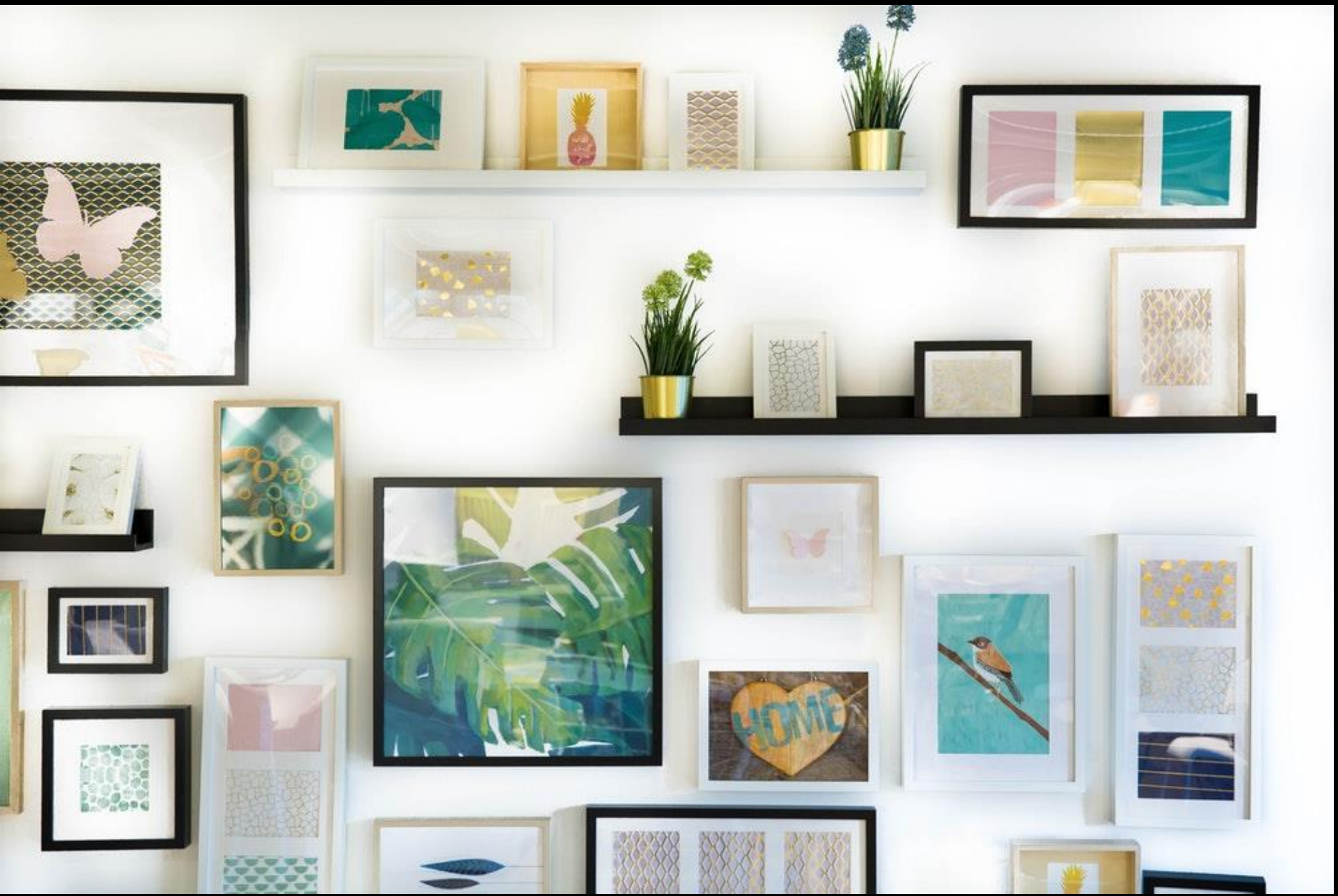
SESSION 7

Where Did the Universe Come From?

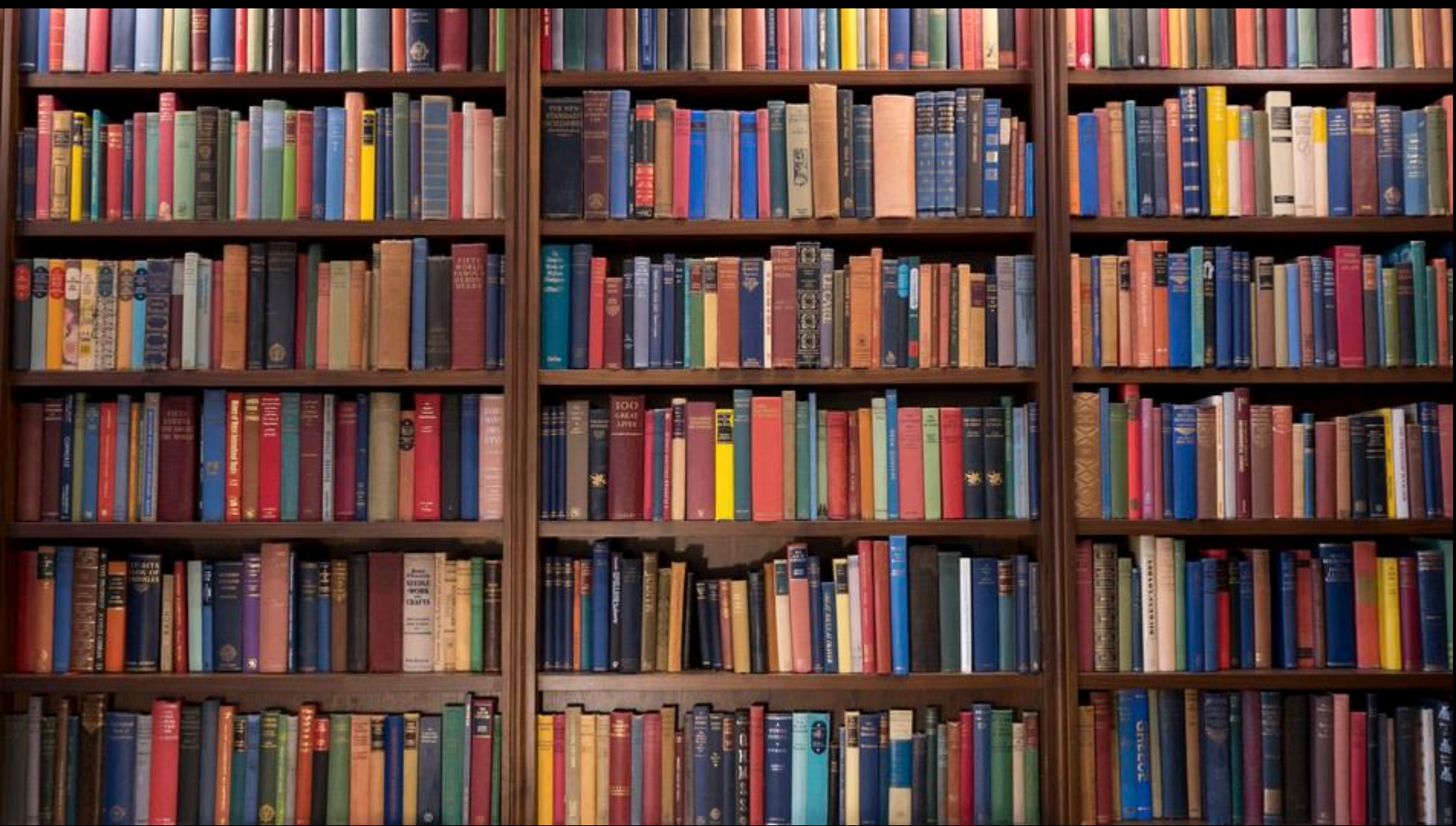


For since the creation of the world His invisible attributes are *clearly seen*, being understood by the *things that are made*, even His eternal power and Godhead, so that they are without excuse...

Romans 1:20













1. What does science tell us about the existence of God?

2. What does science tell us about the nature of God?

21 because, although they knew God, they did not glorify Him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened.

22 Professing to be wise, they became fools,

23 and changed the glory of the incorruptible God into an image made like corruptible man and birds and four-footed animals and creeping things.

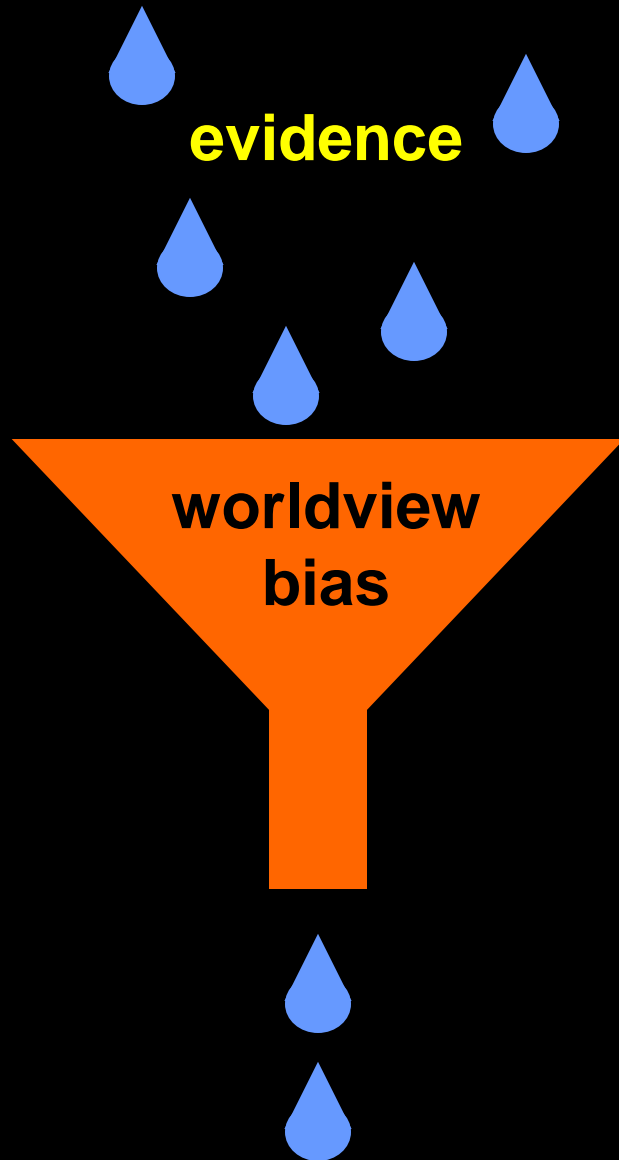


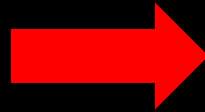
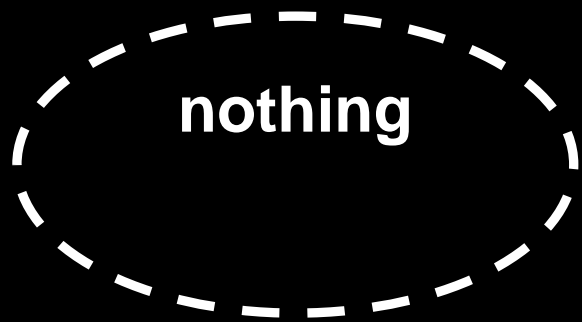


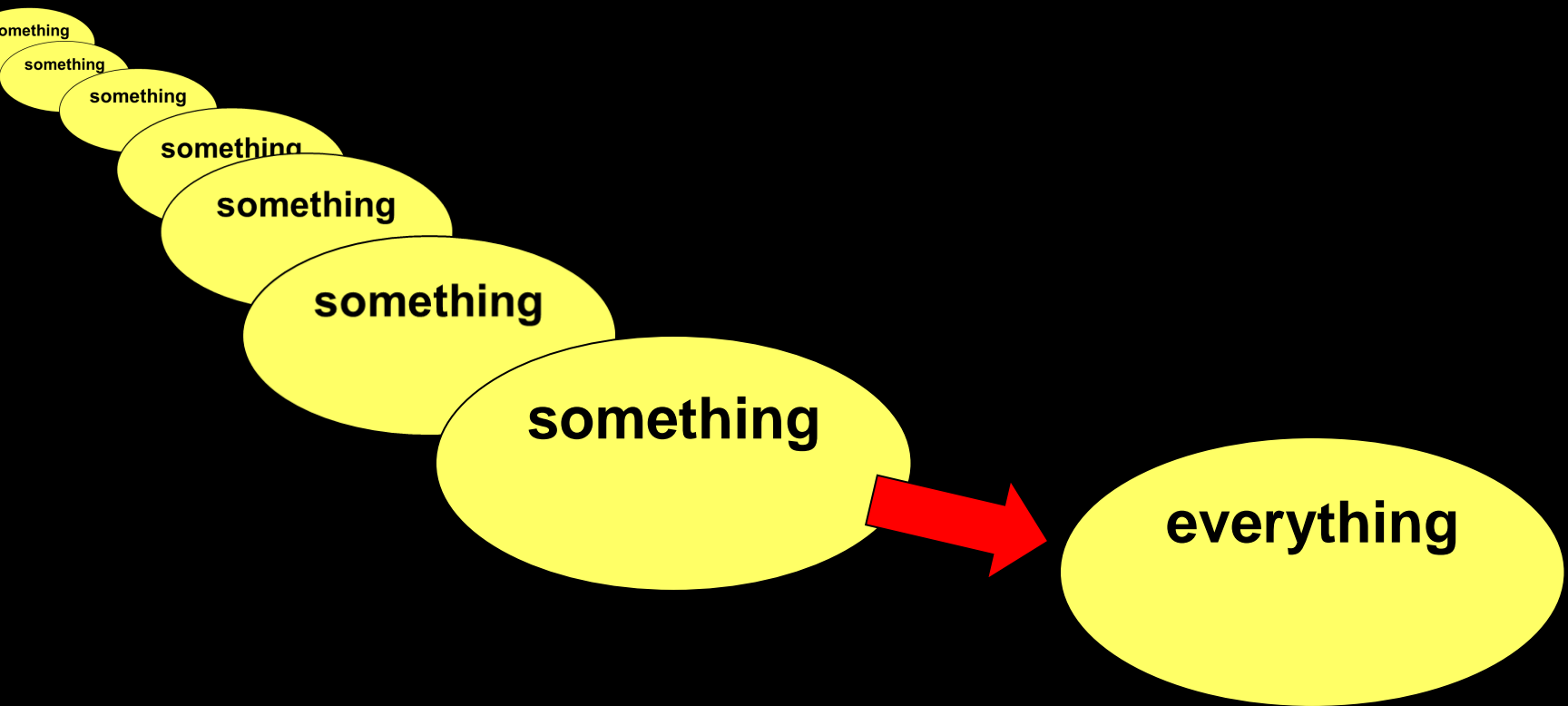
FAITH



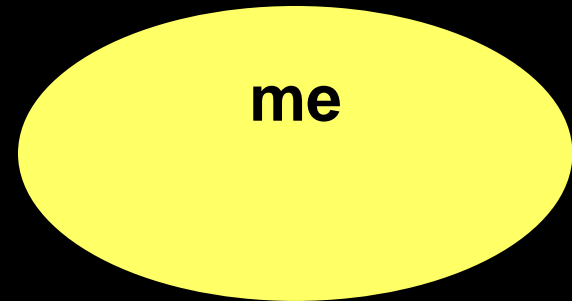
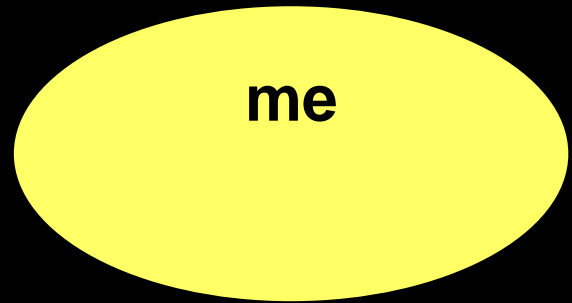
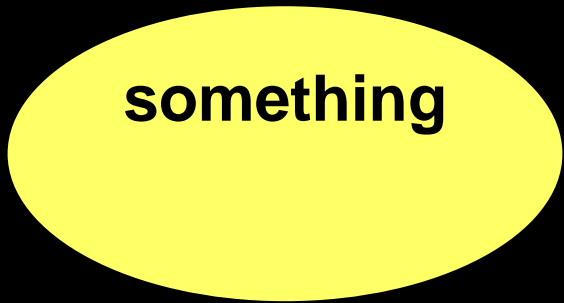
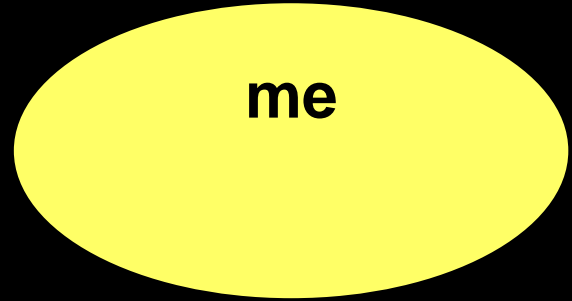
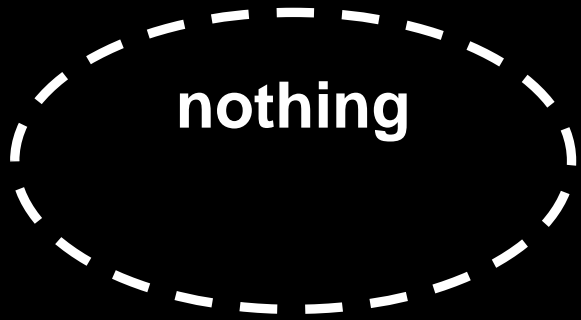
REASON







**“A greater can’t come from a
lesser.”**



**More philosophical
evidence...**

**See the “Kalam Principle”
Williams Lane Craig**

3 logical explanations for the physical world

**It's been
here
forever**

**It was
made by
something**

**It was
made by
someone**

2 logical explanations for the physical world

~~It's been
here
forever~~

It was
made by
something

It was
made by
someone

“...He has given signs of Himself, visible to those who seek Him, and not to those who seek Him not. There is enough light for those who only desire to see, and enough obscurity for those who have a contrary disposition.”

Pascal



Science is...



**“thinking God’s
thoughts after Him”**

-Kepler

3 main areas of evidence...

cosmology - the universe

biology – life

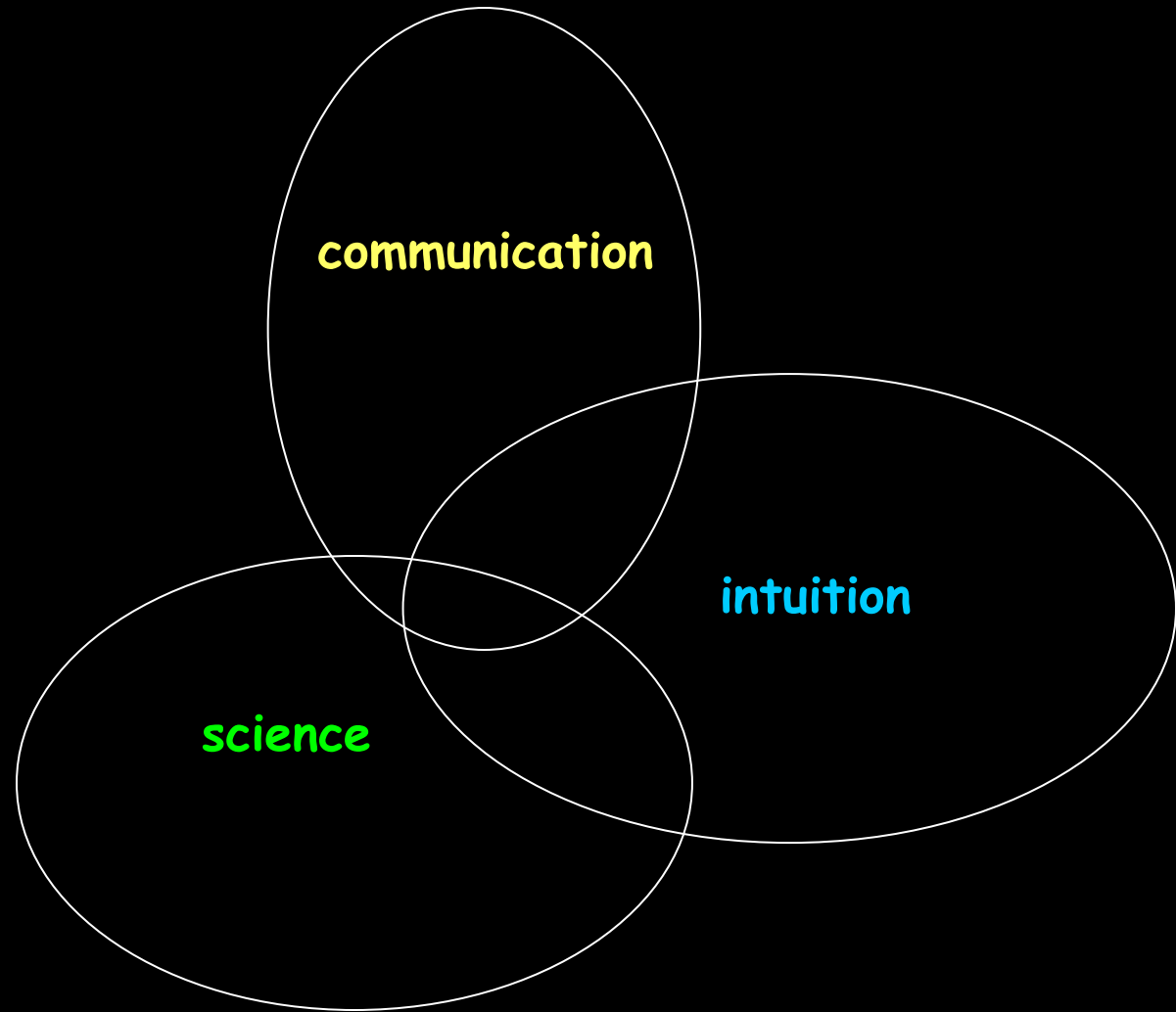
psychology - consciousness



The heavens declare the glory of God, and the sky proclaims his handiwork. Psalm 19:1



Ways of *knowing*...



faith that the
communication is
reliable

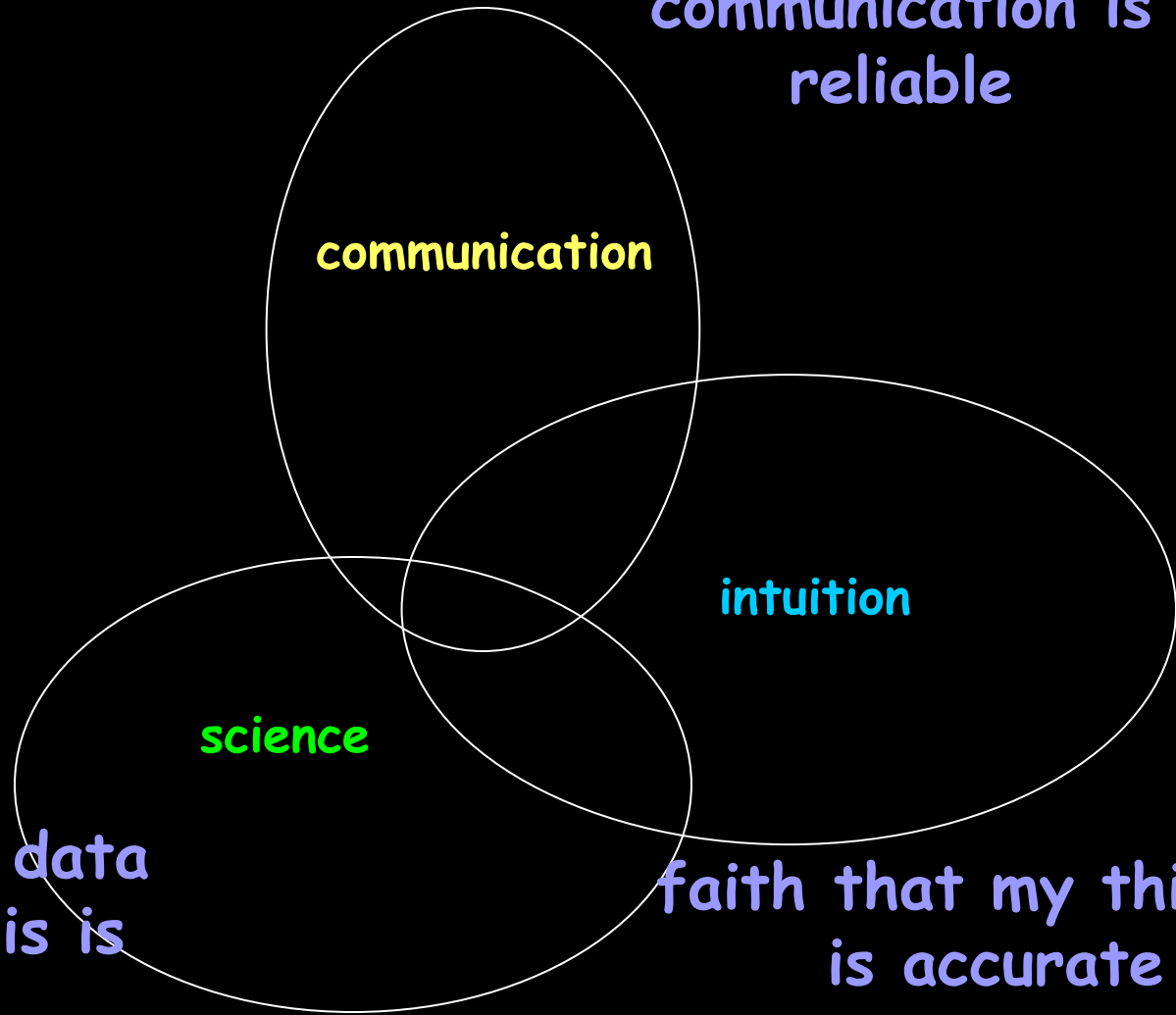
communication

intuition

science

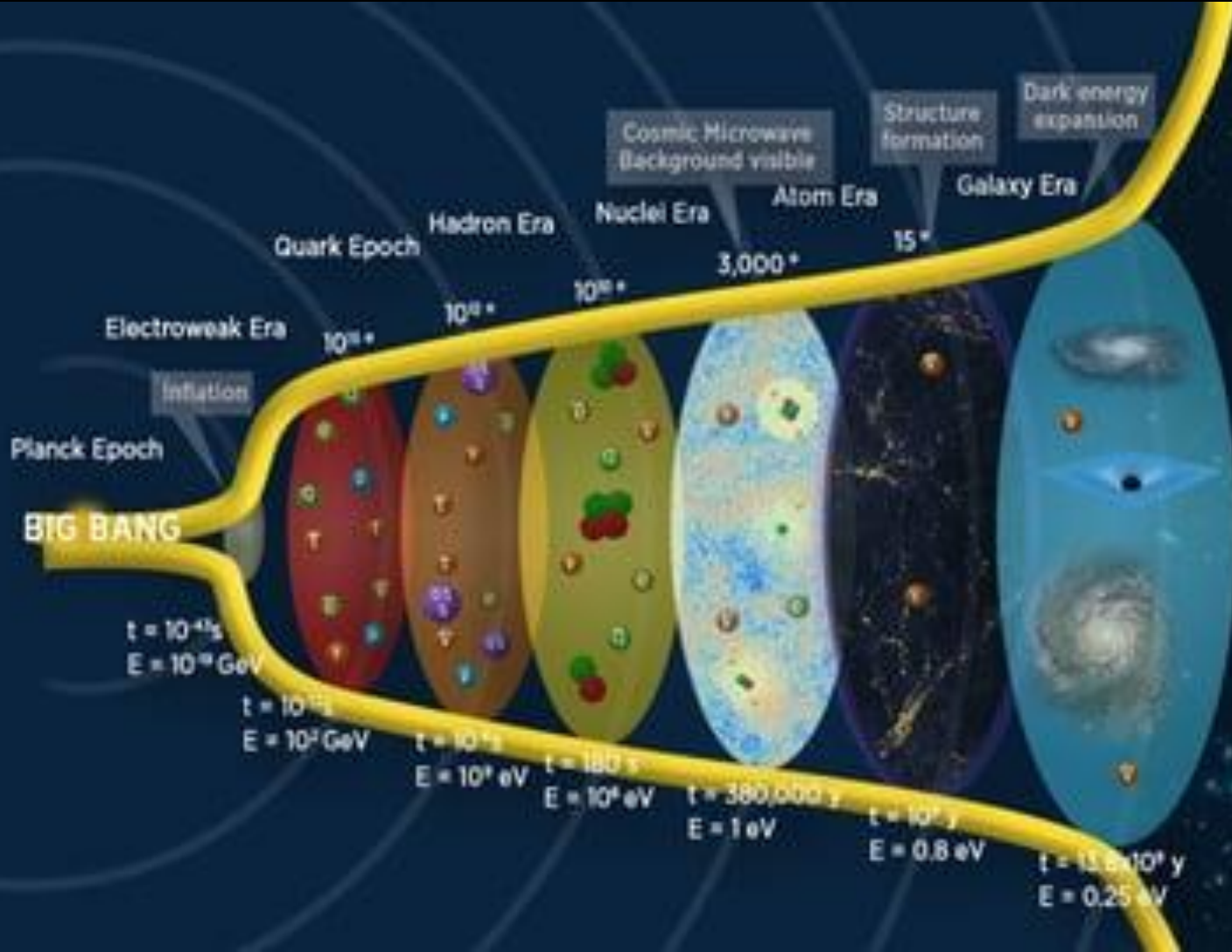
faith that the data
and my analysis is
accurate

faith that my thinking
is accurate





Big Bang?



Cosmic Inflation?

Some parameters of our universe that seem fine-tuned for life...

Quantity	Symbol	Value in our universe
Speed of light	c	$299792458 \text{ m s}^{-1}$
Gravitational constant	G	$6.673 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}$
(Reduced) Planck constant	\hbar	$1.05457148 \times 10^{-34} \text{ m}^2 \text{ kg s}^{-2}$
Planck mass-energy	$m_{\text{Pl}} = \sqrt{\hbar c/G}$	$1.2209 \times 10^{22} \text{ MeV}$
Mass of electron; proton; neutron	$m_e; m_p; m_n$	0.511; 938.3; 939.6 MeV
Mass of up; down; strange quark	$m_u; m_d; m_s$	(Approx.) 2.4; 4.8; 104 MeV
Ratio of electron to proton mass	β	$(1836.15)^{-1}$
Gravitational coupling constant	$\alpha_G = m_p^2/m_{\text{Pl}}^2$	5.9×10^{-39}
Hypercharge coupling constant	α_1	1/98.4
Weak coupling constant	α_2	1/29.6
Strong force coupling constant	$\alpha_s = \alpha_3$	0.1187
Fine structure constant	$\alpha = \frac{\alpha_1 \alpha_2}{\alpha_1 + \alpha_2}$	1/127.9 (1/137 at low energy)
Higgs vacuum expectation value	v	246.2 GeV
QCD scale	Λ_{QCD}	$\approx 200 \text{ MeV}$
Yukawa couplings	$\Gamma_i = \sqrt{2}m_i/v$	Listed in Tegmark et al. (2006)
Hubble constant	H	71 km/s/Mpc (today)
Cosmological constant (energy density)	$\Lambda (\rho_\Lambda)$	$\rho_\Lambda = (2.3 \times 10^{-3} \text{ eV})^{-4}$
Amplitude of primordial fluctuations	Q	2×10^{-5}
Total matter mass per photon	ξ	$\approx 4 \text{ eV}$
Baryonic mass per photon	ξ_{baryon}	$\approx 0.61 \text{ eV}$



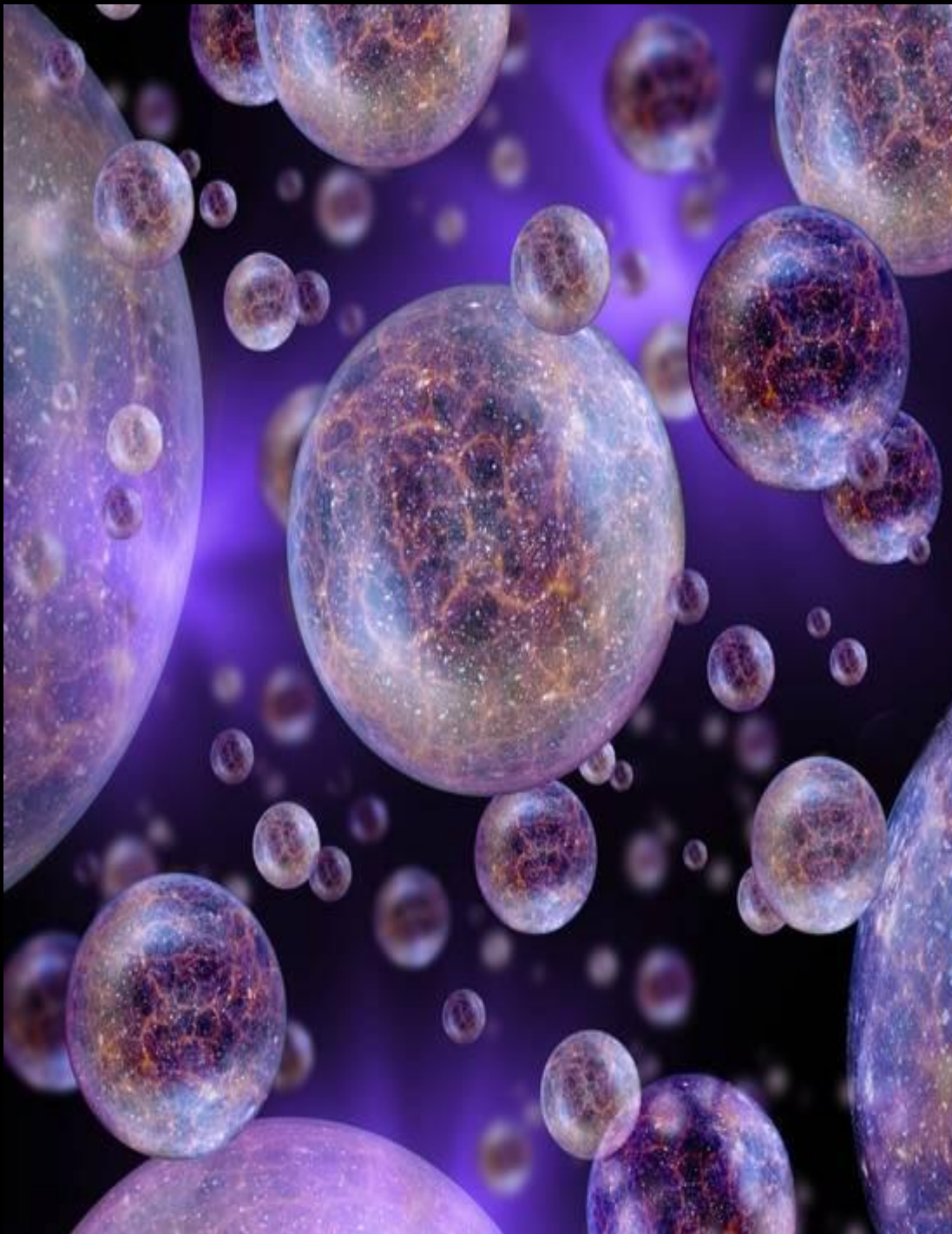
telos

“fine-tuning”





**Can “chance” and
“huge numbers” fix everything?**



multiverse?

multiverse problems...

no empirical evidence

**the system that makes all of the
universes has to be fine-tuned**

**speculating on huge numbers to get
improbable results produces
problems exponentially**

anthropic principle



“firing squad principle”



I'll take
the one on
the far left...
the panda
bear...





A new trend in science...

“Shut up and calculate!”

N. David Mermin, Cornell University