

A person in a dark jacket and pants stands with their back to the camera on a dark, flat surface, looking up at a vast, colorful nebula in space. The nebula features bright blue and cyan hues in the center, transitioning to orange and red towards the edges, all set against a dark background filled with distant stars.

Welcome to

Science and Religion:

“Why do Faith and Reason Interact”

Los Alamos Faith and Science Forum
Summer Study Series
2021

A person stands on a dirt path, looking up at a large, glowing orange planet (likely Mars) in a sunset sky. The planet is the central focus, with the person's silhouette in the foreground. The text is overlaid on the image.

Welcome to
Science and Religion:
“Why do Faith and Reason Interact”

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Summer Study Series

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Lecture #1

Science and Religion:
**“Why can/should Faith and Reason
Interact”**

Bob Reinovsky
(for the Board of Directors of the LAF&SF)

June 2, 2021

Los Alamos Faith and Science Forum
Summer Study Series
2021

Outline

- Role and Mission of the Los Alamos Faith and Science Forum
- Big Questions at the intersection of Faith and Reason (Religion and Science) -- F(RR)S
- Why is there is even a question about the interactions of F(RR)S
- Some perspectives on what drives these two ways of thinking and knowing to really interact
- ... And talk about two in a little detail
 - Process of interaction
 - Value/virtue of interaction
- Quick summary of the Summer program

The Los Alamos Faith and Science Forum

- Founded 2014, the Forum is a group of scientists, engineers, clergy, and laity, here in Los Alamos, helping each other, and our community, to think about science and religion, and about the harmony and complementarity of these two modes of being and knowing, by providing information, education, and a framework for dialogue.

- Early in its life, the Los Alamos Faith and Science Forum articulated its purpose:

“(To) Invite the religious and scientific communities to join in living deeply into the mysteries of religion and of science by looking deeply into both.”

- We are committed to explore the discoveries and mysteries of both religion and science; the Big Questions faced by both; and how each can inform and enrich the other in their respective quests.
- The work of the forum is supported by private gifts and by several local Los Alamos churches including

BELC

FUMC

IHM Catholic

LDS

TOTH Episcopal

WRPC

The Los Alamos Faith and Science Forum

- *Looking deeply into the mysteries of both implies*
...”thinking about science and religion, and about
the harmony and complementarity of these two modes of being and knowing...”
- Two foundational approaches to processing information
 - *Revelation (faith)*
 - *Physical Observation (reason)*
- Two (human) institutionalizations of those ways of processing information; two “Applications” of the out-come of processing information
 - *Religion*
 - *Science*
- We named the Forum the Los Alamos Faith and Science because
“Los Alamos Faith and Reason /Religion and Science Forum”
was just a mouthful.
- I sometimes use an acronym: Faith and Reason /Religion and Science [...F(R/R)S...]

The work of the Los Alamos Faith and Science Forum includes

- Accessible theology – accessible science
- Study and academic discussion at the undergraduate level
- Inviting older youth, undergraduates/graduate student / post-docs, congregation members, community adults and retirees into dialogue
- Engaging local and invited speakers (frequently Seminary professors)
- A year-round program (inhibited by COVID in 2020-21) including:
 - Reading and study groups,
 - A fledgling writer's group,
 - Exchanges with other similar groups across New Mexico,
 - A planned and structured 8-week summer program, perhaps expanding this year to a few talks, year round.
 - Special programs

**More information about the activities of the Forum is available at;
<https://lafsf.org>**

Los Alamos Faith & Science Forum

PAGES

- [2018 abstracts](#)
- [2019 abstracts](#)
- [2020 abstracts](#)
- [2020 Lenten Seminar Series](#)
- [2020: On-line lecture by Elaine Howard Ecklund](#)
- [LAF&SF Annual Reports](#)
- [Our summer topics](#)
- [Summer 2014](#)
- [Summer 2015](#)
- [Summer 2016](#)
- [Summer 2017](#)
- [Summer 2018](#)
- [Summer 2019](#)
- [Summer 2020](#)
- [Who we are: Los Alamos Faith and Science Forum](#)
- [Winter 2015/2016](#)

Who we are: Los Alamos Faith and Science Forum



Prof. John Haight delivers a public lecture at Fuller Lodge during his visit to Los Alamos in June 2017

The Los Alamos Faith and Science Forum is a group of scientists, engineers, professionals, and laity helping people to think about science and

We aim to provide a venue for community dialogue on the Big Questions at the interface between Faith and Reason (Religion and Science) – because those “Big Questions” drive the intellectual life of both – and the discussion between them

- **Who are we?**

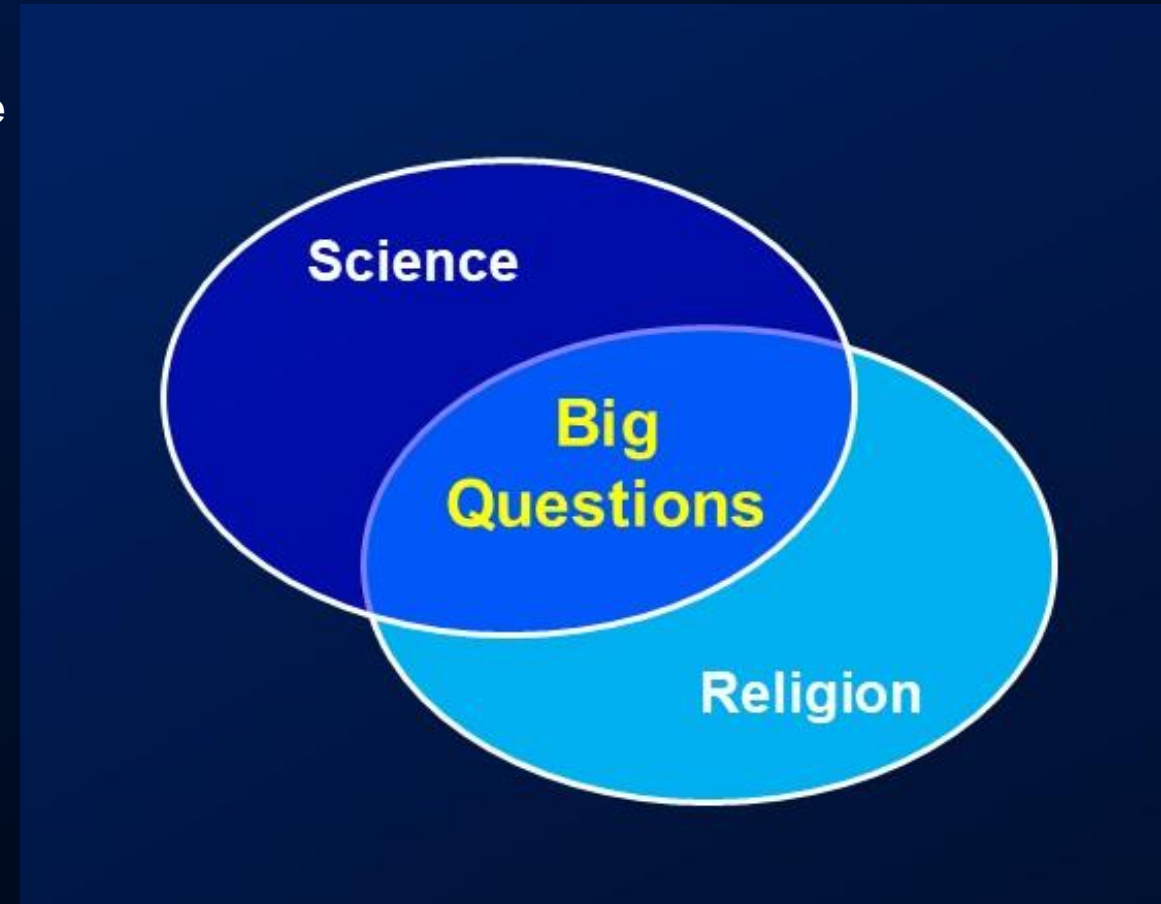
- Consciousness, self –awareness
- Neurology, psychology, physiology, brain science
- Free-Will

- **Where did we come from?**

- Cosmology
- Quantum Mechanics
- Physical and Biological Origins of Life
- Evolution

- **What lies ahead?**

- Trans-, Post-humanism
- Stewardship of our Planet
- Technology, Morality, Ethics
- End states of the Universe



Addressing the Big Questions is a tall order, and we don't claim to have the answers – or even a comprehensive approach to addressing them

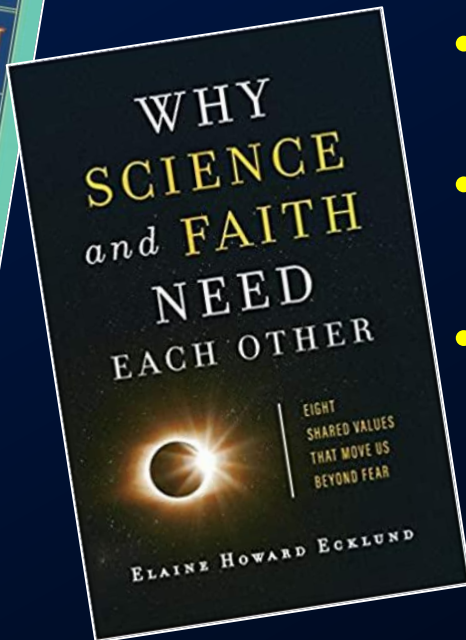
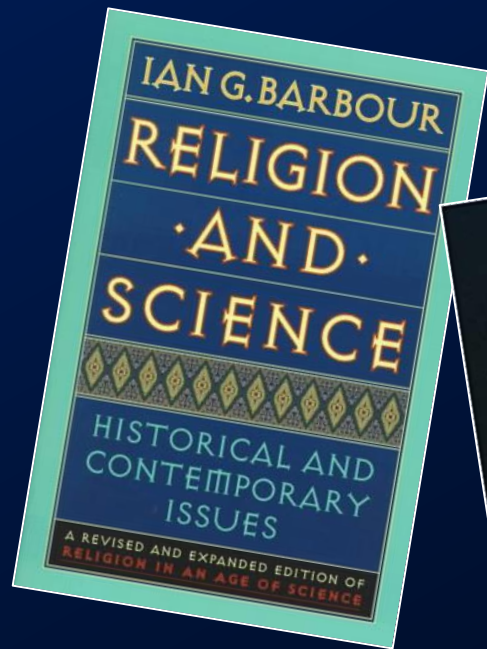
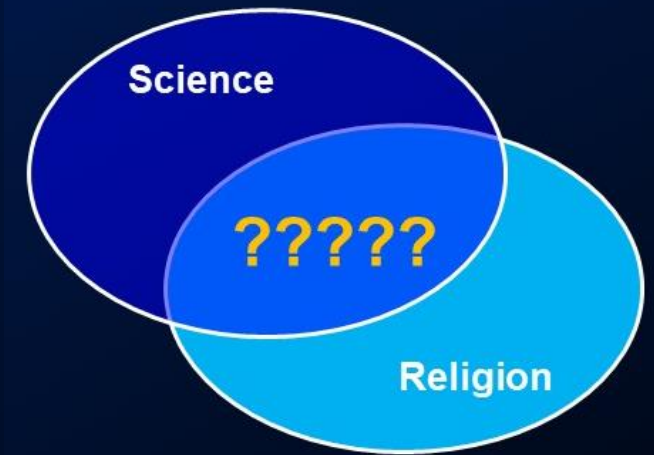
- ...but we are trying to make a start;
 - **2015: Origins: Where Did We Come From**
 - **Deborah and Loran Haarsma**
 - **2016: What Makes us Human**
 - **Justin Barret**
 - **2017: Evolution and Hope**
 - **John Haught**
 - **2018 : Purposeful Evolution**
 - **Dennis Venema**
 - **2019: Are You a Robot: Brain, Mind and Soul**
 - **Warren Brown**
 - **2020: Hope, Nature, Sin, and Transhumanism: Are We Making Progress?**
 - **Elaine Ecklund**
- **Over time we will, undoubted, circle-back, returning to some of the topics we have already discussed – hopefully adding new information and insight.**

The Big Questions

- Who are we?
- Where did we come from?
- Where are we going?

Here in 2021, we are working on those “Big Questions” by addressing a more fundamental question: **Why Science and Religion can/should/do interact?**

- The LAF&SF starts from the fundamental assumption that there is an intersection between Science and Religion.
- Does such an intersection exist at all? Why do we say so
- It’s a question because some have postulated a variety of “Modes of Interaction” including:



- **Conflict**
Science Wins, Religion Wins
- **Independence**
They address different and “non-overlapping” aspects of reality
- **Dialogue**
They each raise questions they cannot (alone) answer, let’s talk
- **Cooperation**
They impact each other by each embracing limits imposed by the other

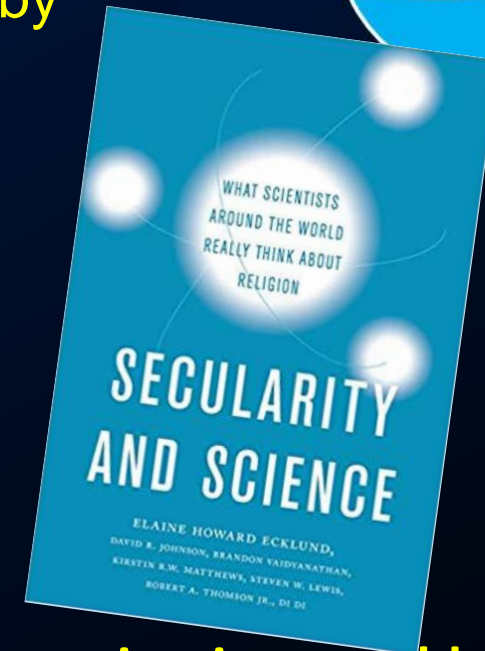
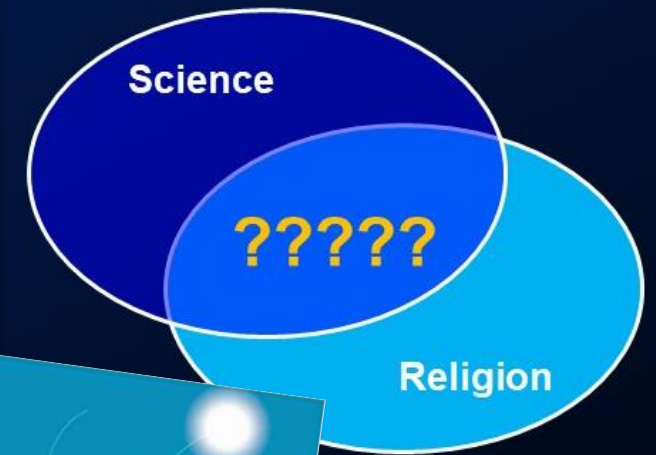
Ian Barbour, “Religion and Science”

Elaine Ecklund “Why Science and Faith Need Each Other”

Here in 2021, we are working on those “Big Questions” by addressing a more fundamental question: **Why Science and Religion can/should/do interact?**

- The LAF&SF starts from the fundamental assumption that there is an intersection between Science and Religion.
- Does such an intersection exist at all? Why interact?

... And it's a question because the Independence Mode is, by far, the preferred mode among practicing scientists.



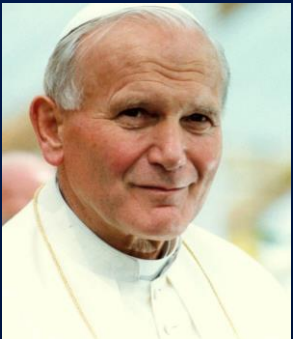
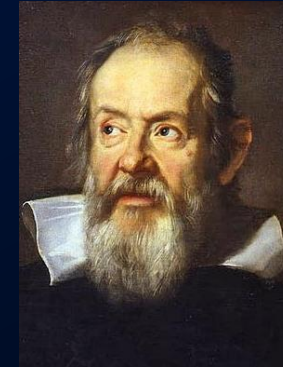
Practicing scientists, worldwide, “duck” the question!

Frequency of responses to survey question: "For me personally, my understanding of science and religion can be described as a relationship of..." (by percent)								
	France	Hong Kong	India	Italy	Taiwan	Turkey	U.K.	U.S.
Conflict; I consider myself to be on the side of science	31	25	19	23	10	24	32	29
Independence; they refer to different aspects of reality	63	48	44	61	66	34	48	57
Collaboration; each can be used to help support the other	6	25	27	16	23	32	12	13

Even if scientists, statistically, embrace the **Independence Mode** of interaction between religion and science....

...in addressing the Big Questions, we should ask how science can inform religion; and how religion can add (depth and) meaning to our lives and to our scientific endeavors.

- “The Bible shows the way to go to heaven, (science shows) the way the heavens go.”
(Galileo Galilei)



- “Science can purify religion from error and superstition. Religion can purify science from idolatry and false absolutes.”
(Pope John Paul II)



- “Science takes things apart to see how they work. Religion puts things together to see what they mean.”
(Rabbi Jonathan Sacks)



Jonathan Sacks “The Great Partnership: Science Religion and the Search of Meaning

Why should/can/do Faith and Reason Interact? Six possibilities

- Share a common objective, asserting that there are fundamentals of truth, and both are working to find it
 - Both reject complete relativism
 - Each uses its own tools and its own unique set of data
- Share the desire to address the same Big Questions (Lectures 2,3)
 - Who are we?
 - Where did we come from?
 - Where are we going?
- **Share the similar processes for thought and exploration (Lecture 4)**
 - That process is based on successive refinements of the understanding of observations leading to more general principles

- **Share similar values**

Curiosity
Doubt
Humility

Creativity
Healing
Awe

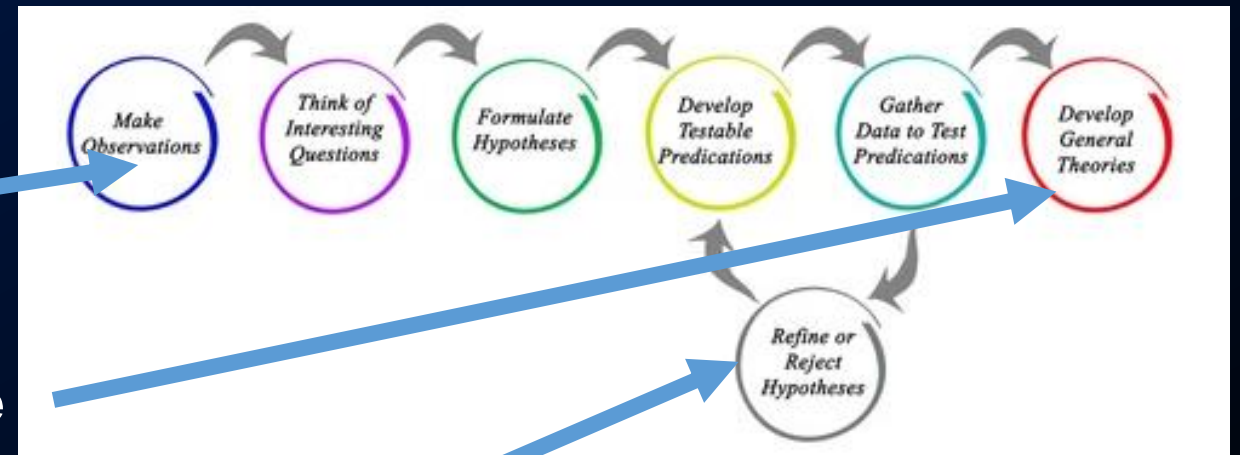
Shalom
Gratitude

Why should/can/do Faith and Reason Interact

- **Can place boundary conditions on each other while still respecting each other unique approach and data sets.**
 - **Reason (science) imposes some limits what religion can believe (Lectures 6-8)**
 - **Origin Stories (Adam and Eve)**
 - **Destiny (End) concepts**
 - **Faith (religion) limits what science should do – Ethical practices (Lectures 4-5)**
 - **Bio-Ethics**
 - **Medical Ethics**
 - **Cyber Ethics**
 - **WMD**
- **Address the uncertainty that seems to plague human thought (Lecture 2-3)**
 - **Uncertainty about life, relationships, death and what comes next**
 - **Uncertainty about how fundamental processes play out**
 - **Quantum Mechanical Phenomena**
 - **Cosmology**

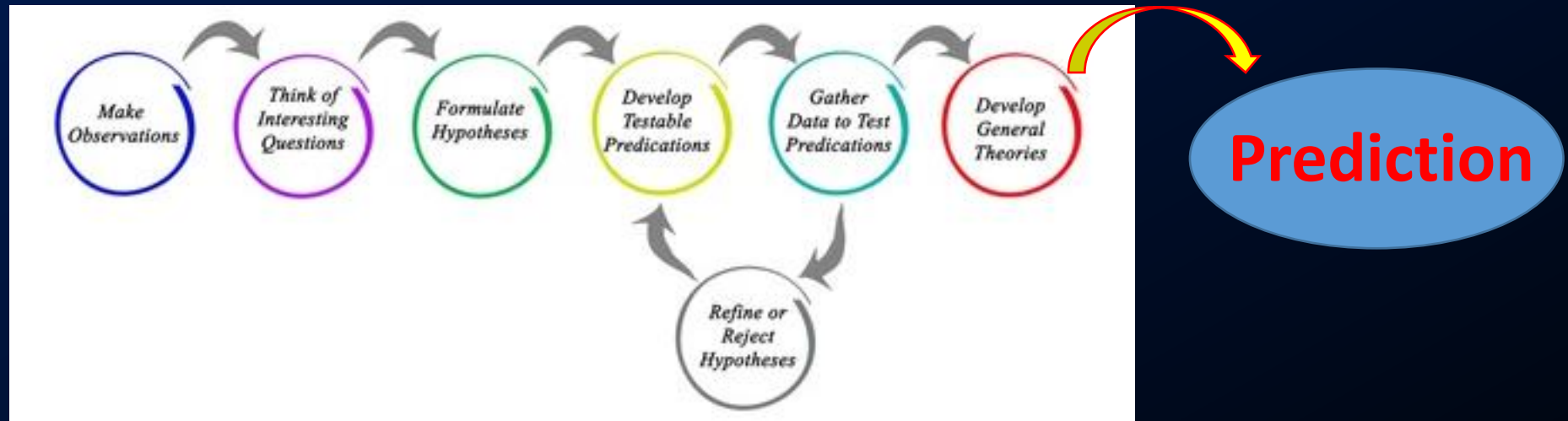
Why should/can/do Faith and Reason/Religion and Science Interact

- **F(R/R)S Share similar processes for thought and exploration**
- That common process, “scientific method”, emerges frequently in popular discourse.
- The scientific method assumes that there are fundamental global, static, sometimes subtle (and perhaps even not completely knowable) **general principles that govern the behavior of the physical world.**
- The objective of the “scientific method” is to tease out those general principles.
- Fundamentally the scientific method uses **observational data**, features of the world that we can measure (and repeat) from which we “infer” (induce) a **general principle**
- The core function of the “scientific method” is to **refine our understanding of the general principle, by iteration**— advancing it from a “hypothesis” (guess) to a “theory”, The most validated, and generally applicable of theories are called “Laws”.
- “Laws” refined using the scientific method apply over a specified portion of the universe – not necessarily everywhere



Why should/can/do Faith and Reason/Religion and Science Interact

- **F(R/R)S Share similar processes for thought and exploration**
- While the general purpose is to refine a hypothesis into a theory, then into a Law, method, can, at any stage be used to make a **PREDICTION** about a heretofor unexplored situation – the better the general principle is validated, the more reliable the prediction.



- Religious belief (church doctrines) are analogous to the “general principles”
 - Initial observations (science) are sometimes Revelation (faith)
 - We refine our understanding of Revelation by comparing its content with other real life situations
 - ... arriving at (divine) Laws that predict future outcomes

Why should/can/ Faith and Reason/Religion and Science Interact

- **F(R/R)S Share a common set of values (virtues) in addition to sharing a common process for thought and exploration.**
- Ecklund has developed a fascinating list of 8 such values or virtues and groups them into two categories

- Those related to the process of inquiry:

Curiosity

Humility

Doubt

Creativity

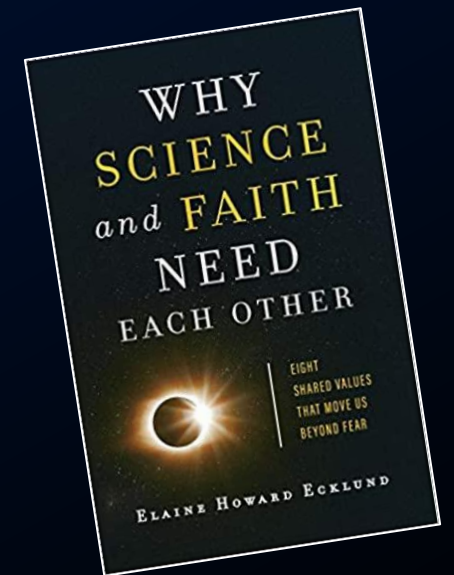
- Those related to the concept of redemption

Healing

Shalom

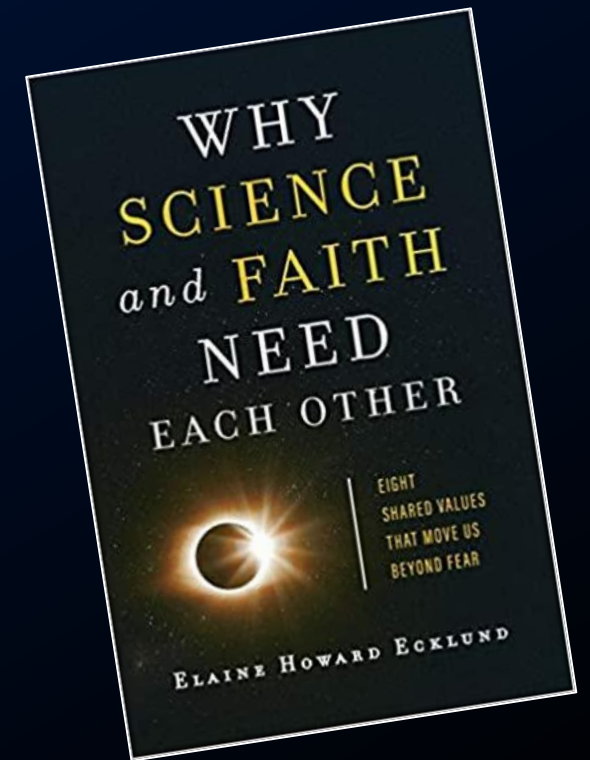
Awe

Gratitude



Why should/can/ Faith and Reason/Religion and Science Interact

- **F(R/R)S Share a common set of values (virtues) in addition to sharing a common process for thought and exploration.**
- **Curiosity:** Wanting to gain a deeper understanding of the universe (and God)
 - Asking how the range of applicability of general principles can be broadened
 - Feeling of dissatisfaction with what we know, now, motivates both
- **Doubt:** Questioning the general principles
 - Defining the limits of applicability
 - Questioning as a mechanism for refining and strengthening faith
- **Healing:** Reducing Suffering, Offering comfort
 - Through physical means
 - Through psychological means
- **Shalom:** Promoting benefit for others
 - Environmental Justice
 - Diversity



This Summer's Series includes eight more talks



June 2 - Lecture 1

**“Why Do Faith and Reason Interact?
An Introduction to the Summer Series”**

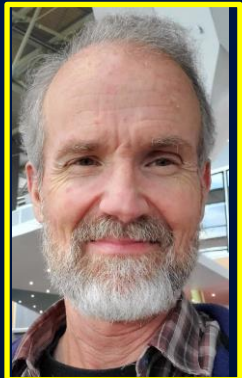
- Bob Reinovsky

– Bob Reinovsky

June 9 - Lecture 2

“Part I: The Psychology of Europe”: How Christianity
Laid the Foundation for Modern Science ... and many other
things, such as human rights and individual freedom”

-Nels Hoffman



June 16 - Lecture 3

“Part II: The Work of the Church”

How Christianity
Laid the Foundation for Modern Science ... and many other
things, such as human rights and individual freedom

-Nels Hoffman

This Summer's Series includes eight more talks



June 23 – Lecture 4

– Bob Dryja

“Ethics: The Common Ground Between Faith and Science”

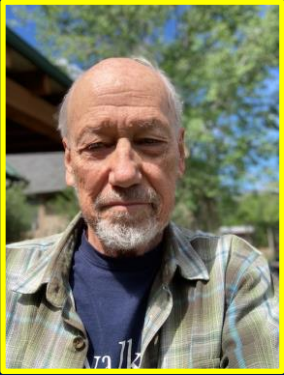


June 30 – Lecture 5

– Gerry Wood

“Ethics of Science Informing Theology”

This Summer's Series includes eight more talks



July 7 – Lecture 6

– Chick Keller

“Scientific Constraints on the Existence of Adam and Eve”



July 14 – Lecture 7

– Morrie Pongratz

**“Christology without the ‘fall’:
Do we need Adam and Eve? Impact on Jesus’ mission(s)”**



July 21 – Lecture 8

-Gary Stradling

**“Adam and Eve's origin and impact: How they fit into
evolutionary history, and how they enabled the explosive
success of mankind”**

This Summer's Series includes eight more talks



July 28 – Lecture 9

– Glenn Magelssen

“History of Vaccines and Christian Response”

Why should/can/do Faith and Reason Interact?

- **Share a common objective, asserting that there are fundamentals of truth, and both are working to find it**
- **Share the desire to address the same Big Questions**
- **Share the similar processes for thought and exploration**
- **Share similar values (virtues) such as Curiosity, Humility and Shalom**
- **Place boundary conditions on each other while still respecting each other unique approach and data sets.**
- **Address the uncertainty that seems to plague human thought**

As possible Discussion Questions, from the list of aspects of interaction:

Which are the most important?

Which drive the discourse today?

- **Share a common objective, asserting that there are fundamentals of truth, and both are working to find it**
- **Share the desire to address the same Big Questions**
- **Share the similar processes for thought and exploration**
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