

# **The Science of God** **by** **Gerald Schroeder**

Gerald L. Schroeder is the author of *Genesis and the Big Bang* and *The Science of God*.

He earned his Ph.D. at the Massachusetts Institute of Technology before moving to laboratories at the Weizmann Institute, the Hebrew University, and the Volcani Research Institute in Israel.

His work has been reported in *Time*, *Newsweek*, *Scientific American*, and in leading newspapers around the world.

He lives in Jerusalem with his wife and their five children.

Schroeder uses references from the Old Testament, Talmud, Maimonides, and the Kabbalah.

**Maimonides** ([/maɪ'mɒnɪdɪːz/](#)) was a Sephardic rabbi and philosopher who became one of the most prolific and influential [Torah](#) scholars of the [Middle Ages](#). In his time, he was also a preeminent astronomer and physician, serving as the personal physician of [Saladin](#).

The Kabbalah (also spelled Kabala or Qabalah) is a Jewish mystical tradition and esoteric system of thought that provides insights into the nature of God and the universe, with the word meaning "to receive".

The only path to knowing God is through the study of science – and for that reason the Bible opens with a description of the creation.

Maimonides, Guide for the Perplexed (1190)

“A word well spoken is like apples of gold in bowls of silver” Prov 25:11  
Mahmonides extended this theme. From a distance the bowl looks to be only a silver bowl. Closer inspection reveals the treasures inside. Schroeder sees the literal text as the silver bowl as the literal text. Only closer inspection and deep study of the text reveals the golden apples within.

**The first golden apple:** The six days that precede Adam and Eve  
The biblical calendar has reached 5786. This adds the ages of the generation of humankind as they are listed in the Bible and rulers thereafter.

The calendar should start with the creation of the world, but it doesn't.  
Two thousand years ago the start of the calendar was set as the creation of human souls and not the previous six days. If the six days of creation were 24 hour days, why not include them in the calendar?

## **The second golden apple:** Understanding time

The passage of time seems constant, but Einstein showed otherwise

Time passes more slowly near high gravity or with higher speed

A clock on the surface of the sun would lose 2.12 seconds for every million earth seconds

An electron travelling at the speed of light has no time passing

## **The third golden apple:** The many ages of the universe

There are any number of ages for our universe. Each location has its own gravitational affect on the passage of time.

So let's find the gravitational effect at the location of creation and adjust the clocks accordingly.

Unfortunately, it's not that simple.

## **The fourth golden apple: A universal clock**

We know three facts with complete certainty about time in the Bible.

First: The Biblical calendar is separated into 2 sections, the first six days of creation and all time thereafter

Second: Time after Adam must have been earth time (historical facts, dating methodologies, archaeology, etc.). There is no relativistic time dilation since Adam.

Third: There is no way the first six days could be earth based time. There was no earth until day 3. The only perspective that would cover the whole six days of creation would be based on the whole of creation.

Schroeder proposes using light (electromagnetic radiation) as the universal clock

The lights we see in heaven are from cosmological events. But there is another source of radiation in the universe. Cosmic background radiation is present throughout the universe unrelated to any source. It was discovered in 1965.

Cosmic proper time relative to the expansion of the universe has been published in various journals. It does not replace conventional time but rather augments it. Schroeder uses cosmic proper time as the clock for the first six days.

**The fifth golden apple:** When the universe was small

Three things have identical effects on the radiation frequency: gravity, change in velocity, and the stretching of space as the universe expands.

Lowering the frequency of radiation raises the wavelength and slows the passage of time.

This can be measured as redshift, and is used to designate cosmological epochs.

At the big bang, the whole universe was packed into a speck and then expanded into a universe billions of light years across.

A very short time after the big bang light was unable to form matter, and the universe was a million million times smaller and hotter than it is now.

## **The sixth golden apple:** The ages of our universe

As the universe expands it gets bigger, cooler, and the wavelength of radiation lengthens exponentially. The cosmic clock records 1 minute while an earth clock would record a million million minutes. As time passes the ratio of time between the atomic and earth clocks would get larger. A little algebra would show the various days of creation as having the earth time equivalents in the chart.

Day	Length of day from Earth's perspective
1	8 billion yrs
2	4 billion yrs
3	2 billion yrs
4	1 billion yrs
5	1/2 billion yrs
6	1/4 billion yrs