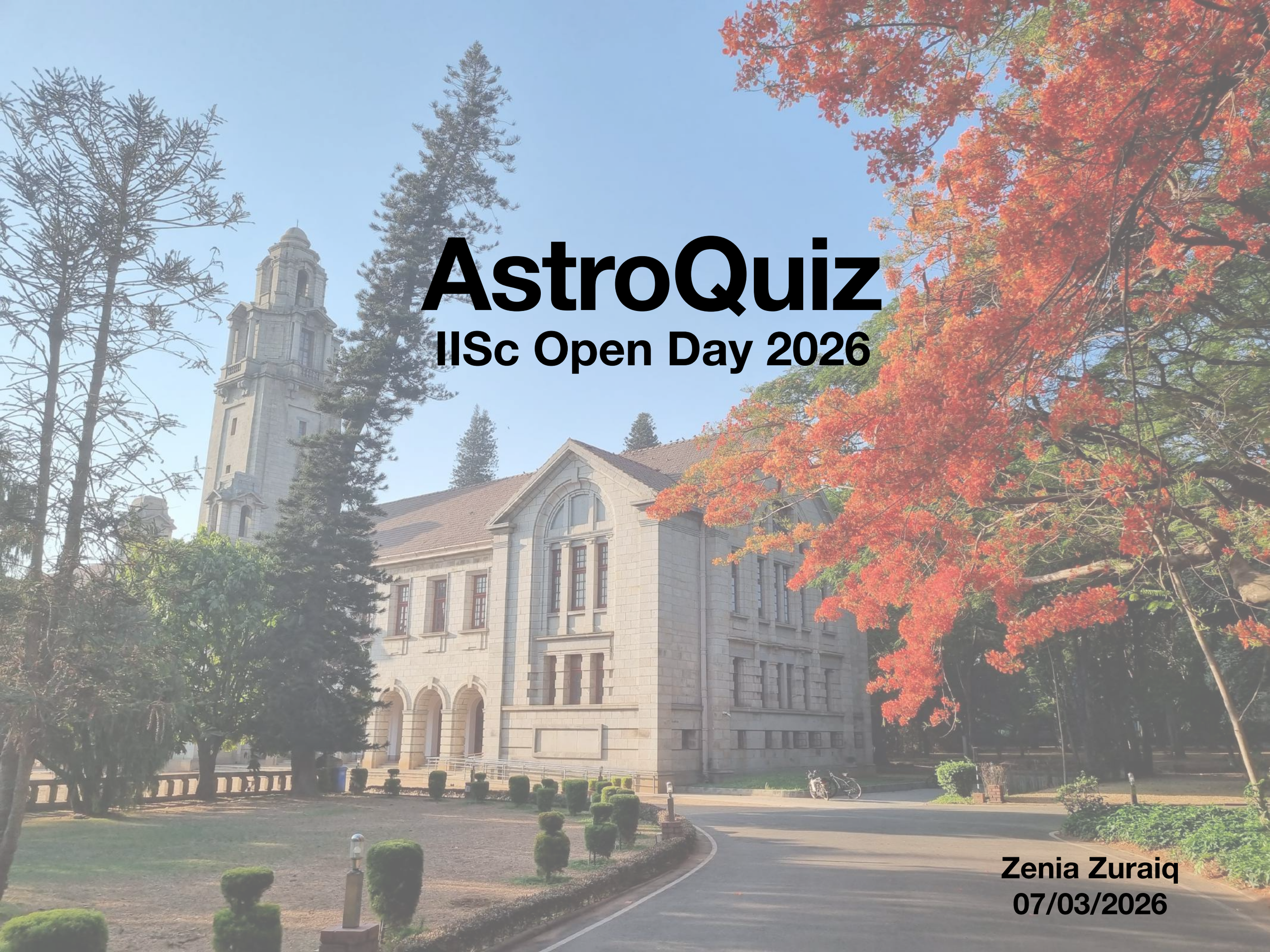


# AstroQuiz

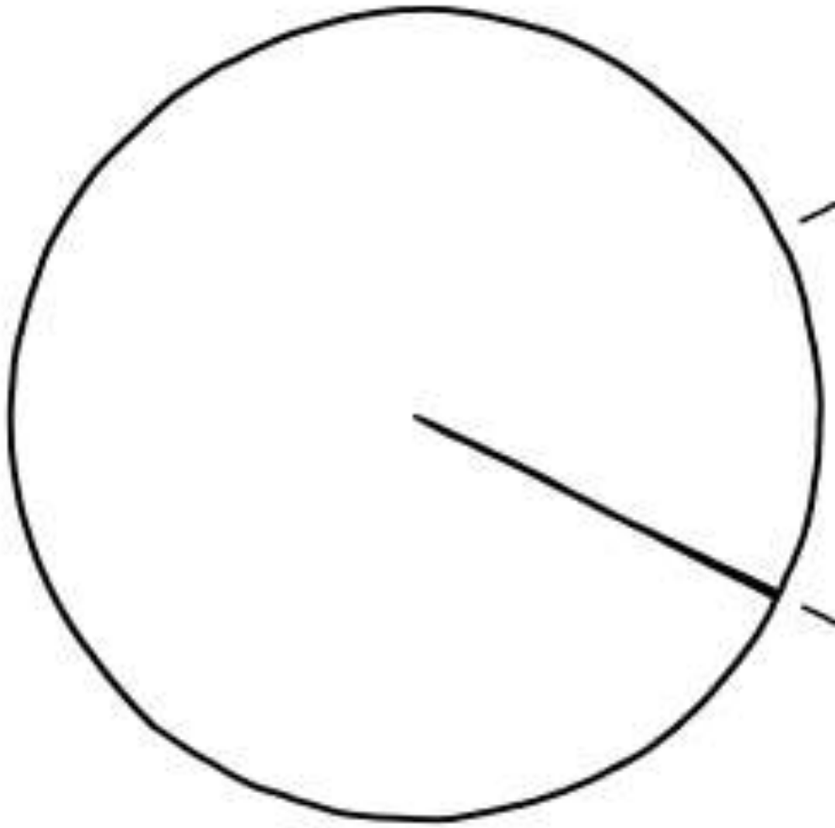
## IISc Open Day 2026

Zenia Zuraiq

07/03/2026

# THE UNIVERSE

BY SCIENTIFIC FIELD



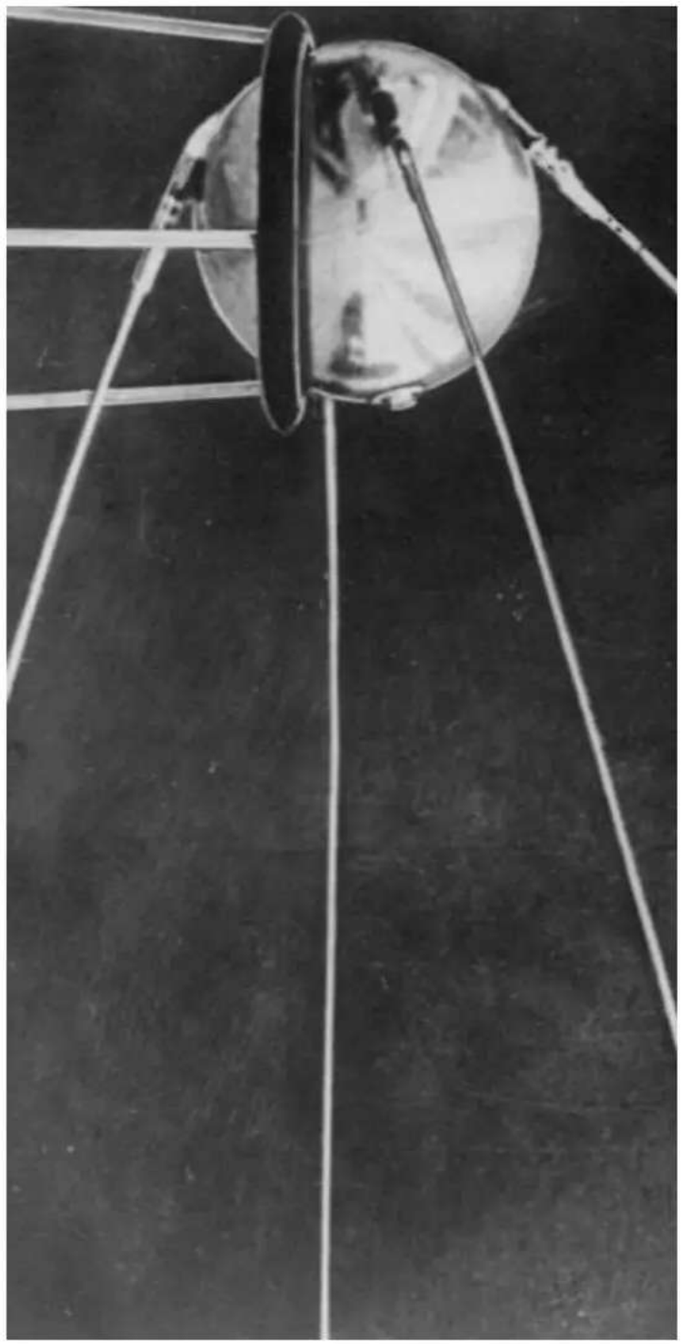
ASTRONOMY

99.99999999999999999999999999999999999999999999999999999997%

OTHER

0.000000000000000000000000000000000000000000000000000003%

# Q.

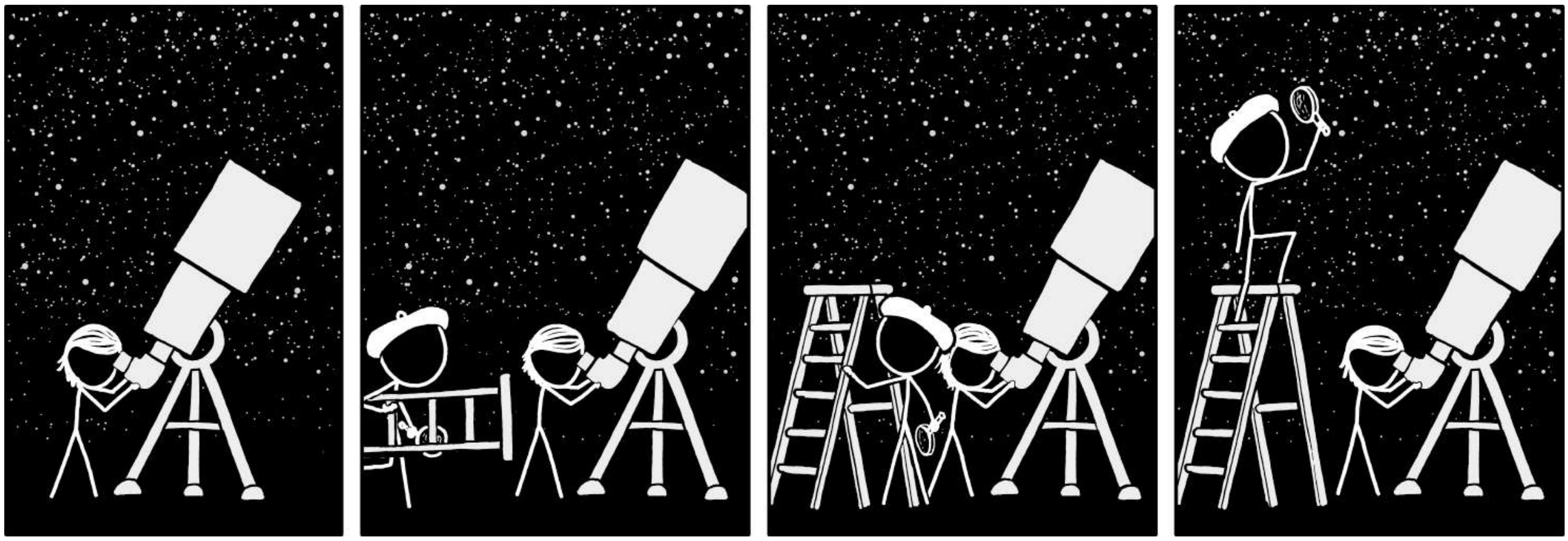





The first picture is of Sputnik-1.

The second picture is of Sputnik-2.

Why the change of design?



# Ans.



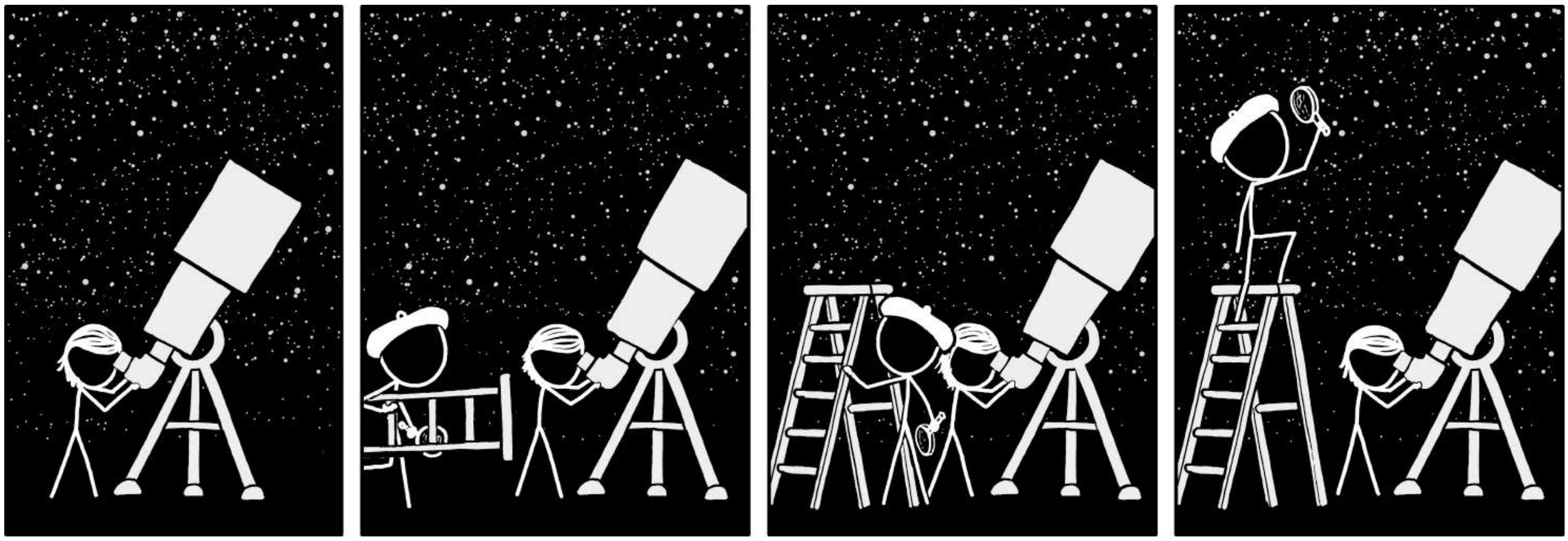
**Extra compartment to carry Laika, the first animal in space!**

# Q.

Perhaps to distance himself from controversy, **X** wrote his famous book *Dialogue* as a play between different characters arguing for and against *heliocentrism*, without committing to any one stance.

However, **X** did not avoid trouble with the church, partly because he named the character arguing for heliocentrism **Simplicio**, translated as “simpleton” in Italian.

Identify the legendary astronomer **X**.



# Ans.



## Galileo Galilei




DIALOGO
DI
GALILEO GALILEI LINCEO
MATEMATICO SOPRAORDINARIO
DELLO STVDIO DI PISA.
*E Filosofo, e Matematico primario del*
SERENISSIMO
GR. DVCA DI TOSCANA.
Doue ne i congressi di quattro giornate si discorre
sopra i due
MASSIMI SISTEMI DEL MONDO
TOLEMAICO, E COPERNICANO;
*Proponendo indeterminatamente le ragioni Filosofiche, e Naturali*
*tanto per l'una, quanto per l'altra parte.*

CON PRI VILEGI.

IN FIORENZA, Per Gio: Batista Landini MDCXXXII.

*CON LICENZA DE' SVPERIORI.*

# Q.

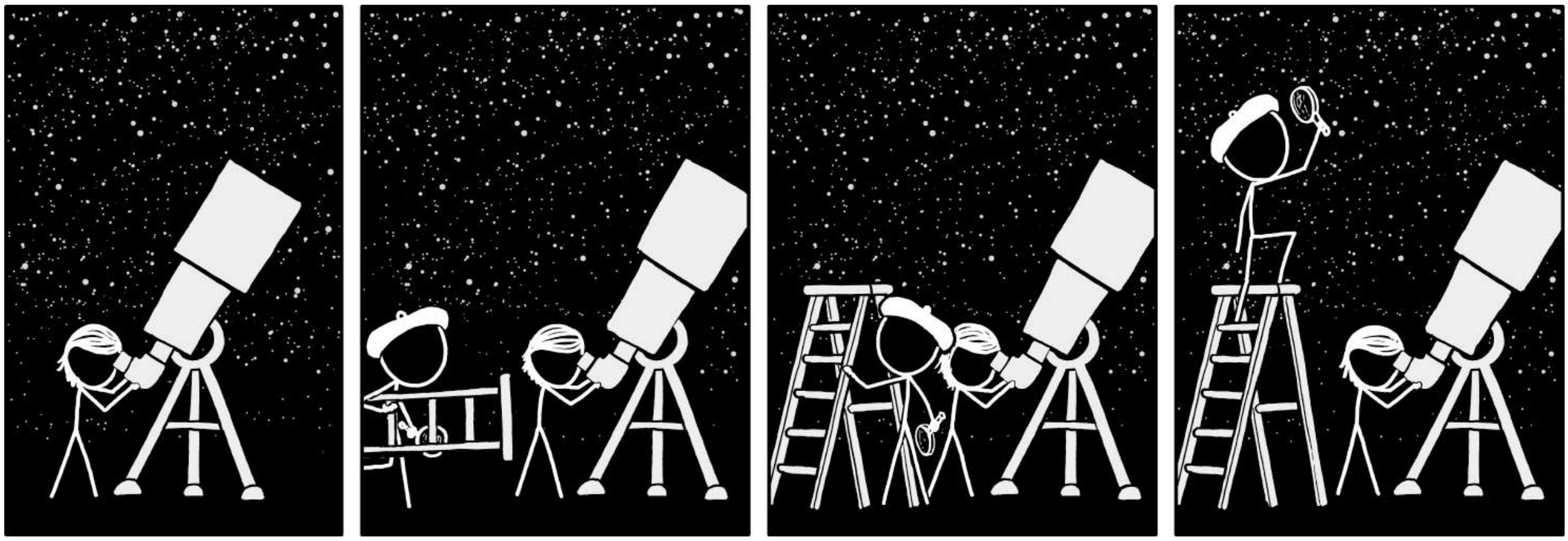
The famous writer Mark Twain was born in 1835, shortly after the appearance of **X**.

He predicted his own death, saying -

"*I came in with **X** in 1835; it's coming again next year, and I expect to go out with it. It would be a great disappointment in my life if I don't. The Almighty has said, no doubt: 'Now here are these two unaccountable freaks; they came in together, they must go out together.'*"

Twain's prediction came true and he died in 1910, one day after the reappearance of **X** was at its closest to the sun.

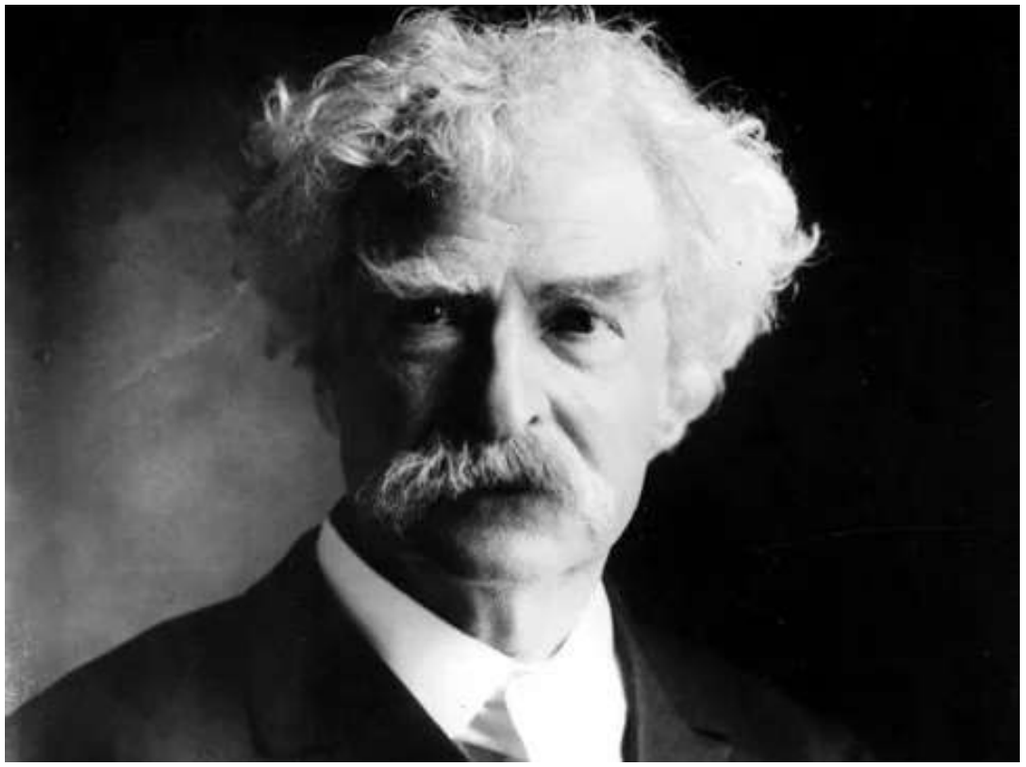
ID **X**.



# Ans.

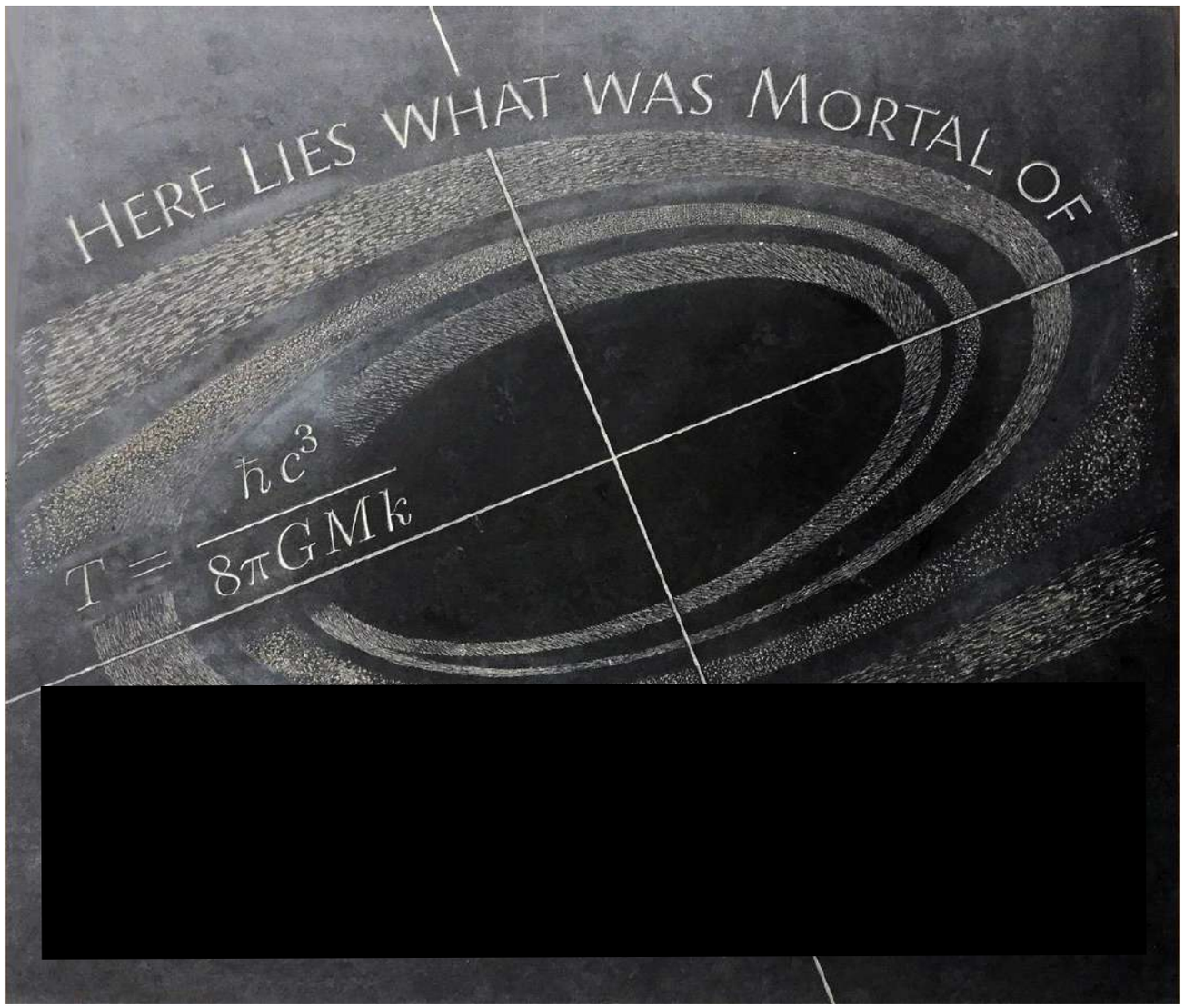
## X = Halley's comet

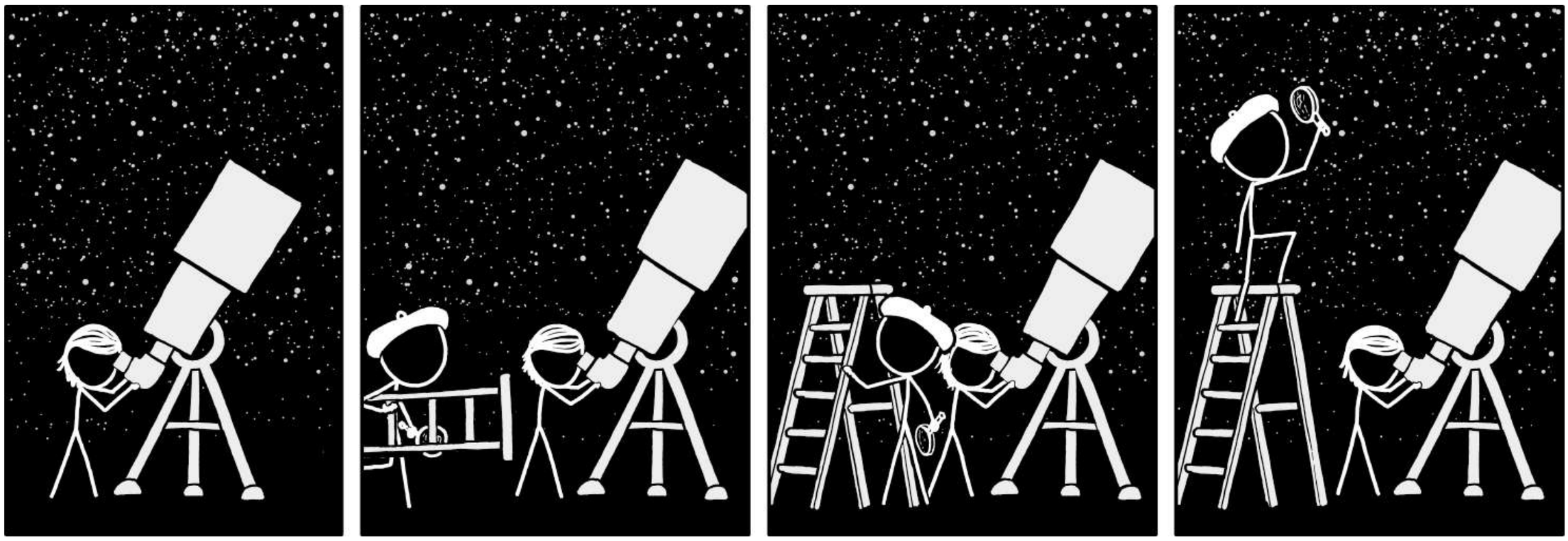




# Q.

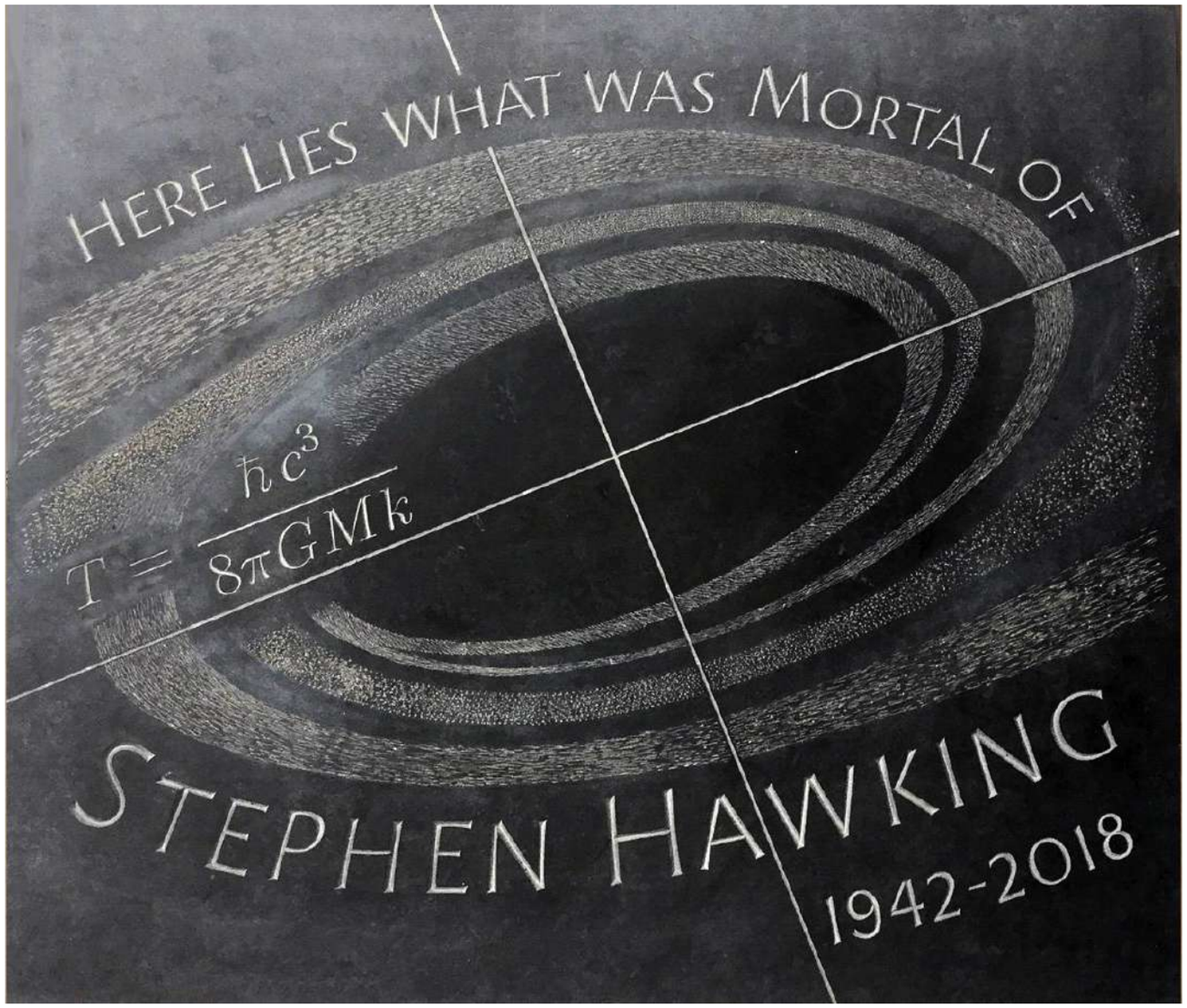
Whose gravesite?

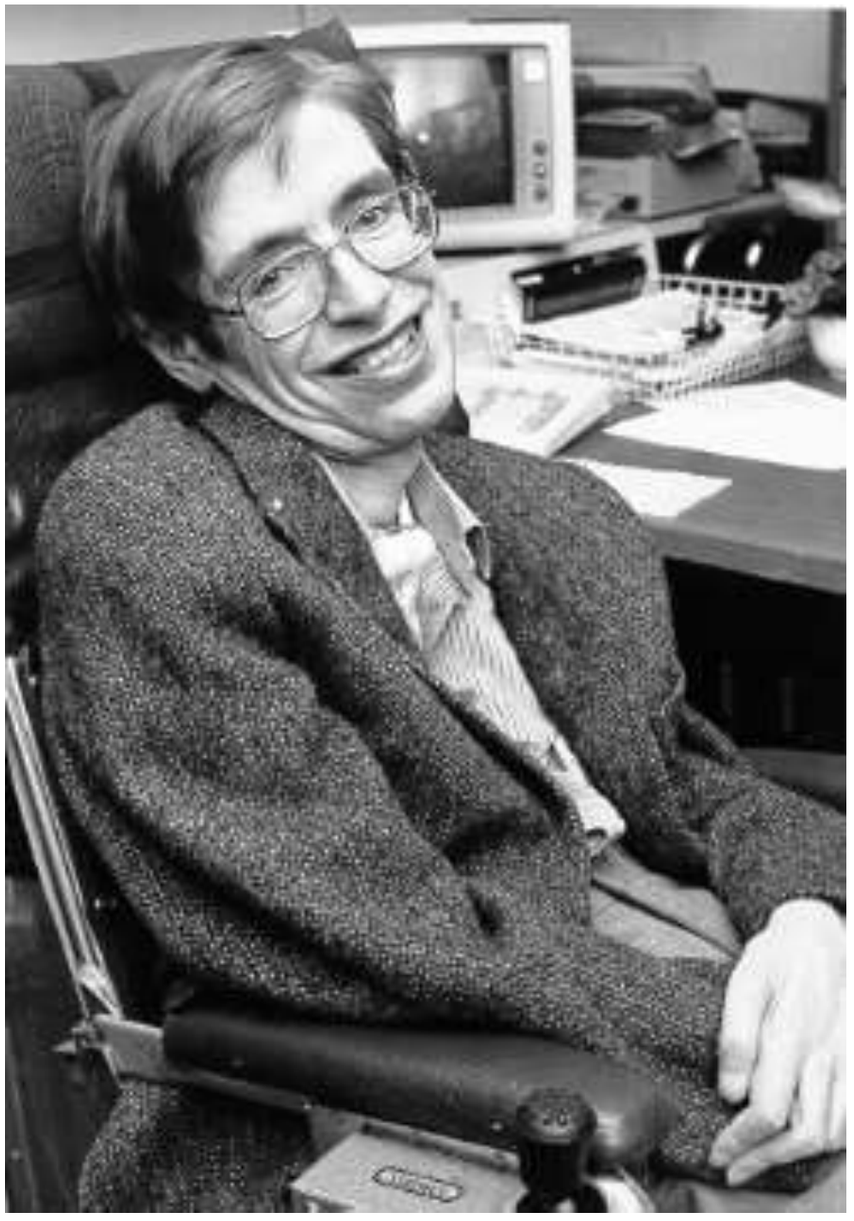




# Ans.

## Stephen Hawking

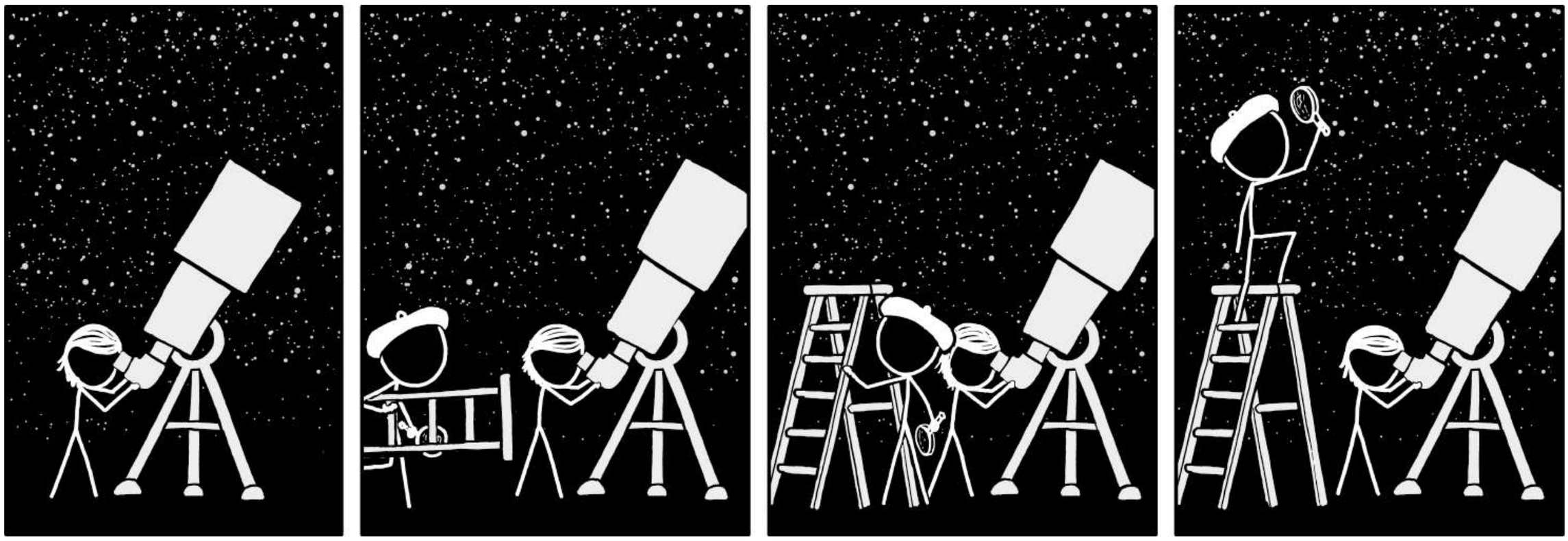


# Q.

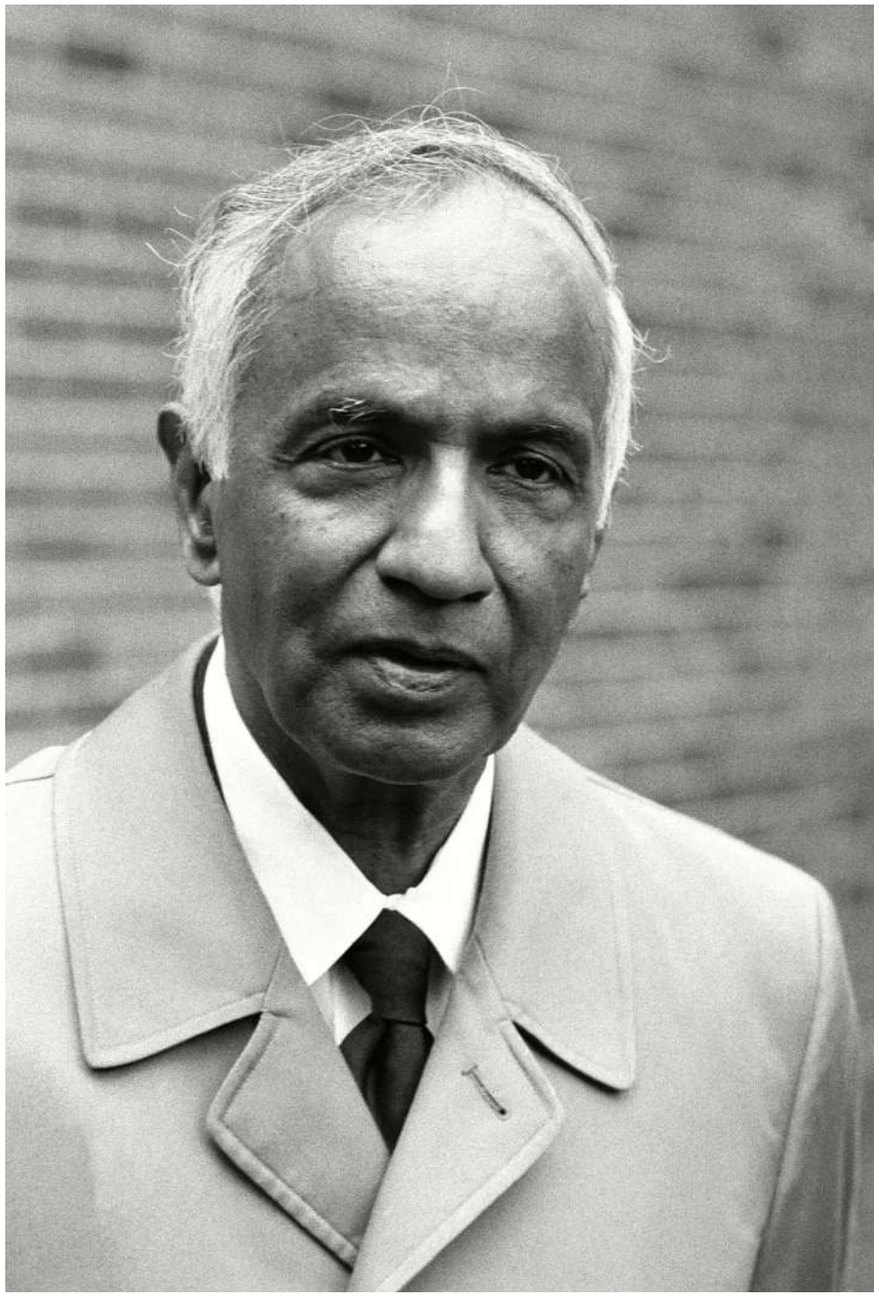
This Google Doodle illustrates and honours a famous Indian-American astrophysicist. ID.





# Ans.

## Subrahmanyan Chandrasekhar



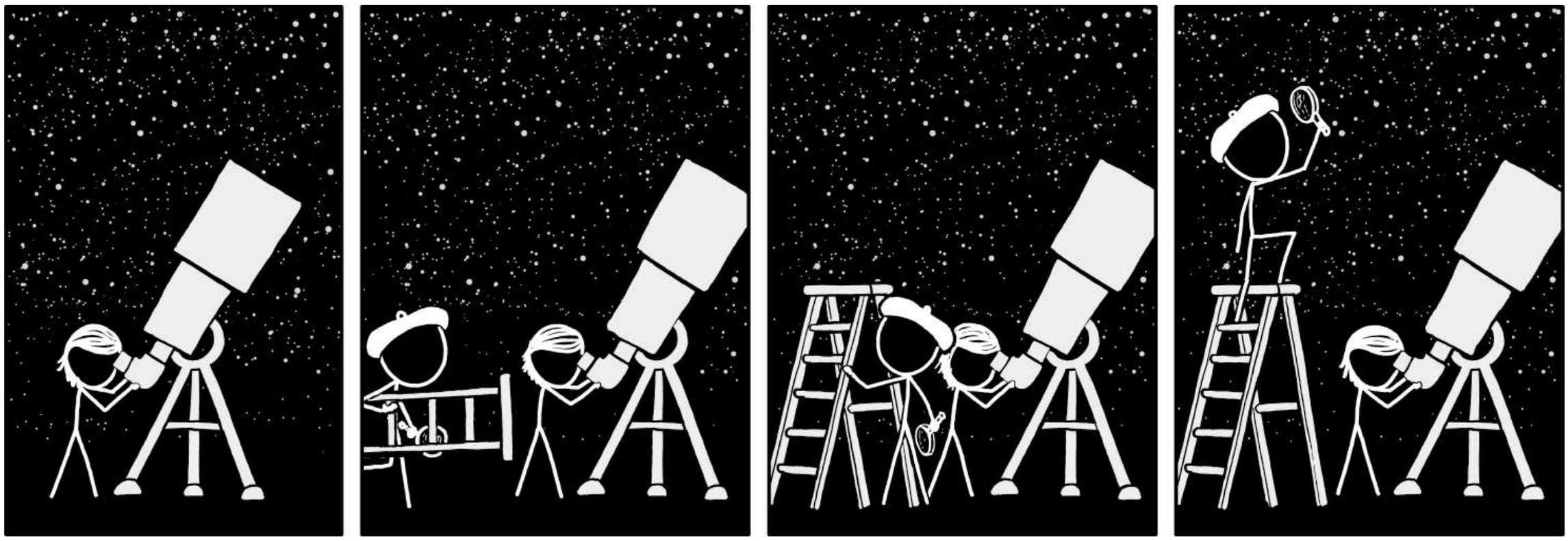
# Q.

Being an astronaut is hard work!

Astronauts are told to avoid **X** in space.

The reasoning: “Food mixtures taken in usually contain all 3 physical phases. On earth, due to the weight of all 3 being different, **X** is possible. There's no gravity in space, so you'd just throw up in your mouth if you tried to **X**.”

ID **X.**



# Ans.

## X = Burping!

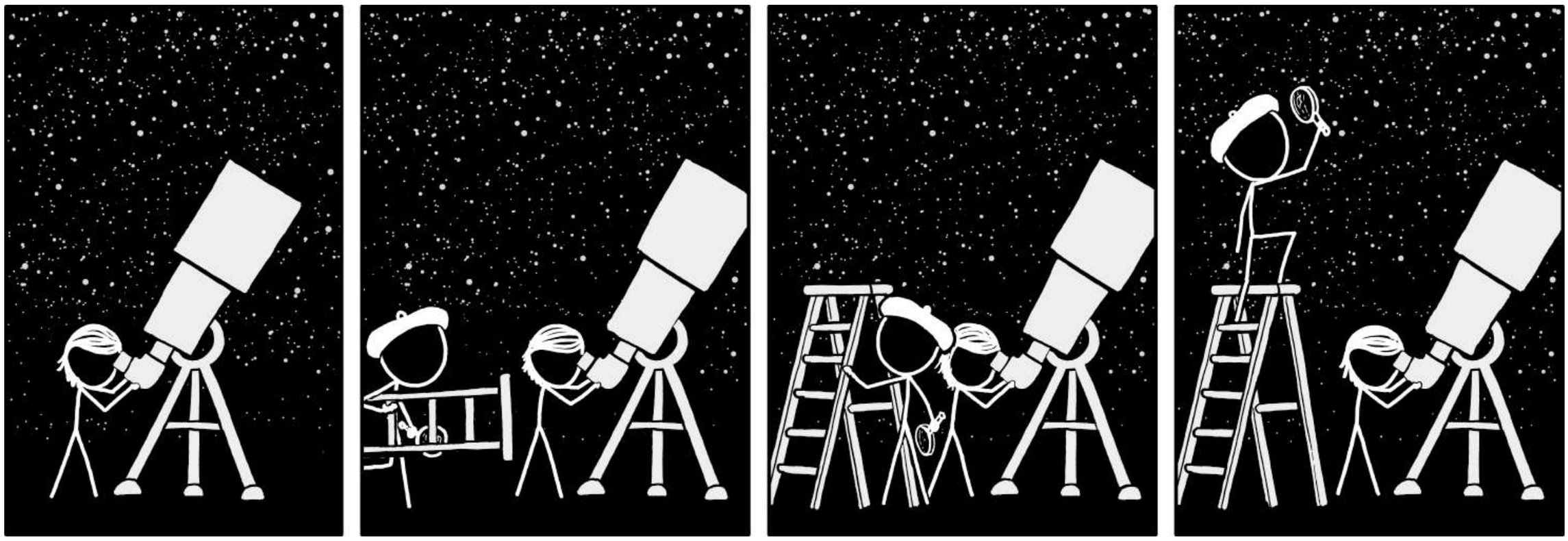


# Q.

This word was coined in the aftermath of a particular event in **2006**.

In January 2007, the American Dialect Society chose the word as its 2006 Word of the Year, defining it as “**to demote or devalue someone or something**”.

ID the word/event.



# Ans.

## Word: Pluto-ed
## Event: Pluto being demoted to a dwarf planet




An artist's conception created at the Harvard-Smithsonian Center for Astrophysics shows Pluto and its moon Charon as seen from the surface of one of Pluto's newly discovered candidate satellites. Pluto was stripped of its status as a planet August 24, 2006. Reuters file

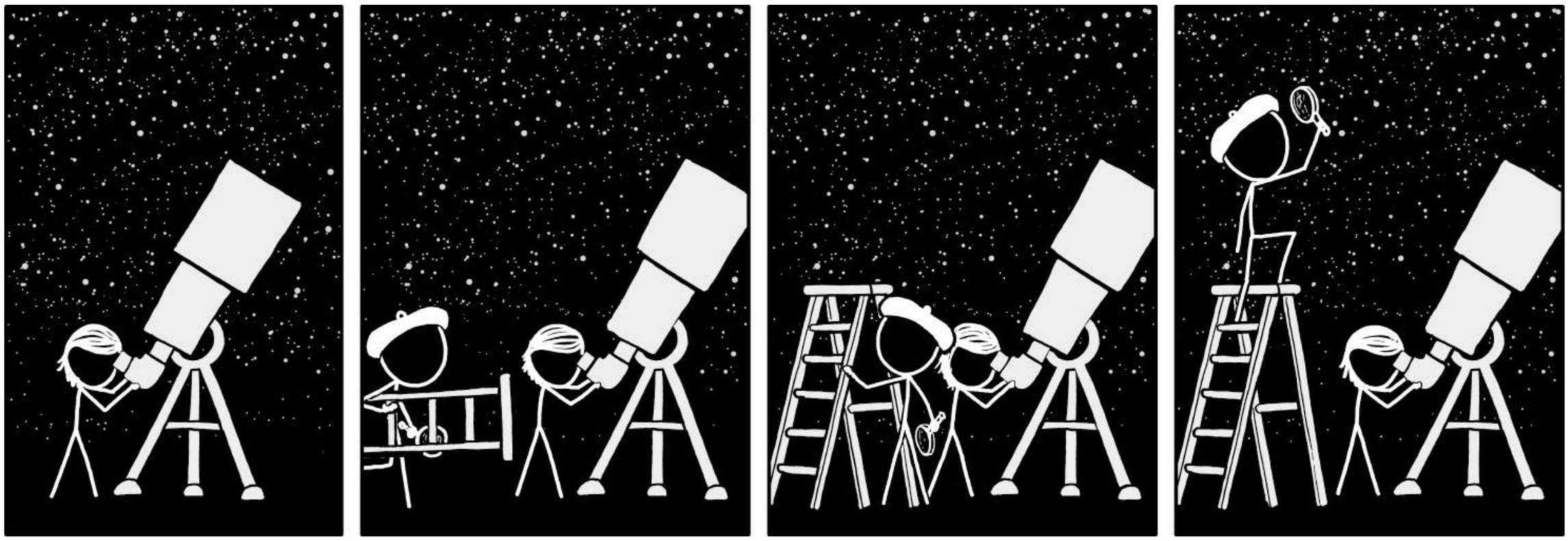
# Q.

The first computers were actually humans!

The **Harvard Computers** were a group of skilled workers who processed astronomical data at the Harvard College Observatory from 1877 up till the early 1930s.

This group painstakingly analysed the overwhelming number of photographic plates - leading to breakthroughs in stellar classification and cataloguing. They contributed to fundamental discoveries on stellar evolution, composition, and other fundamental aspects.

What was unique about this group?



# Ans.

## The Harvard computers were all women!

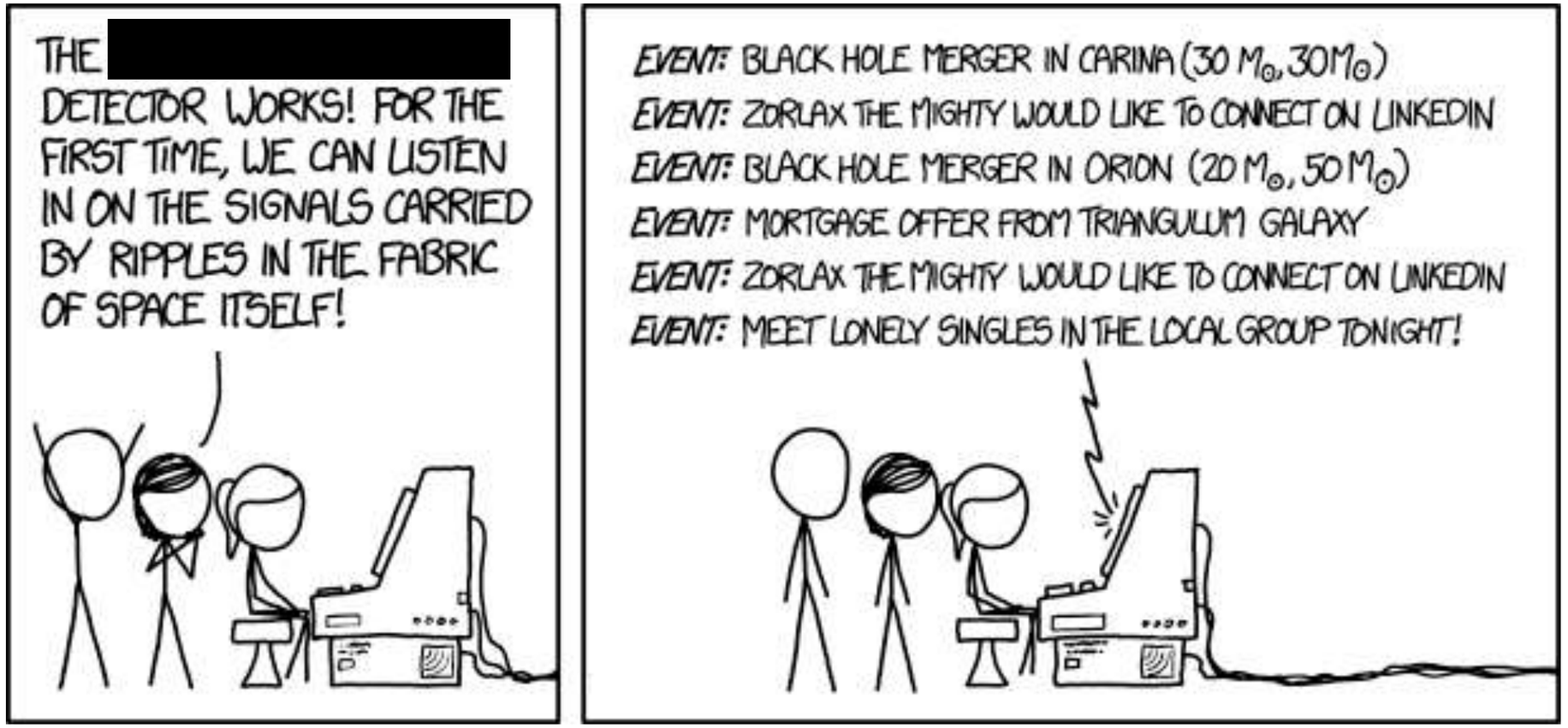


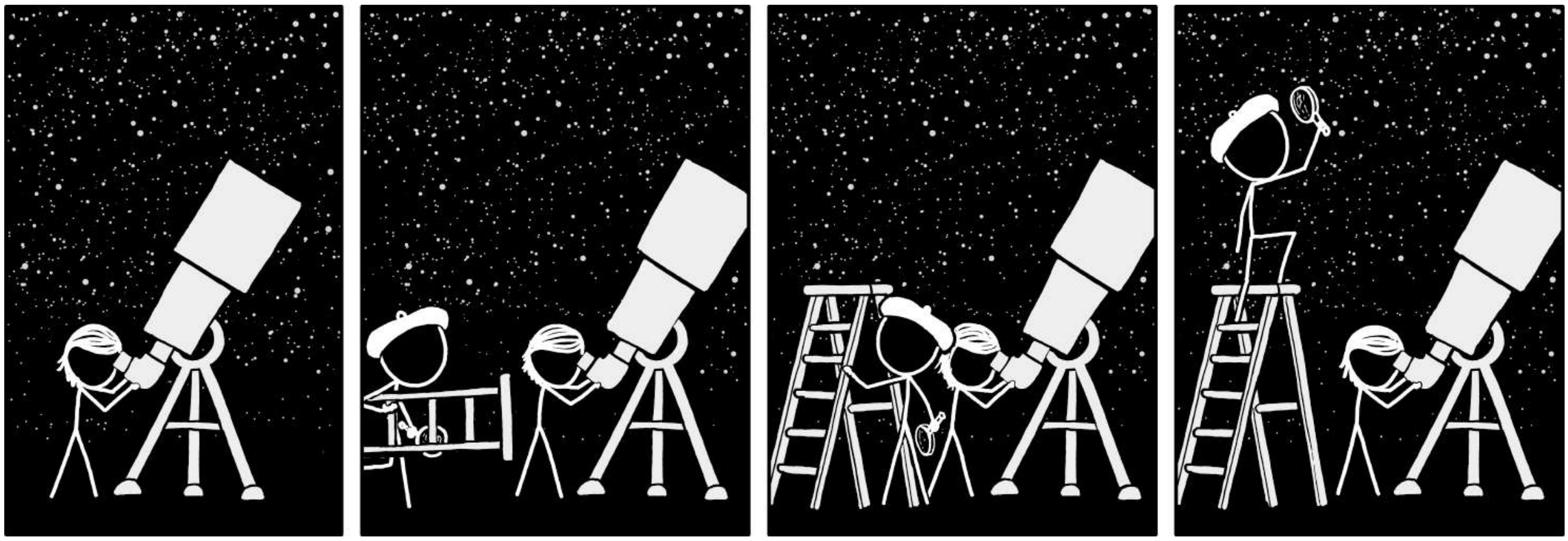
# Q.

This XKCD comic came out in 2016, on the day that the observation of **X** was first announced.

The successful detection of **X** was a confirmation of Einstein's theory of gravity and awarded the 2017 Nobel Prize in Physics.

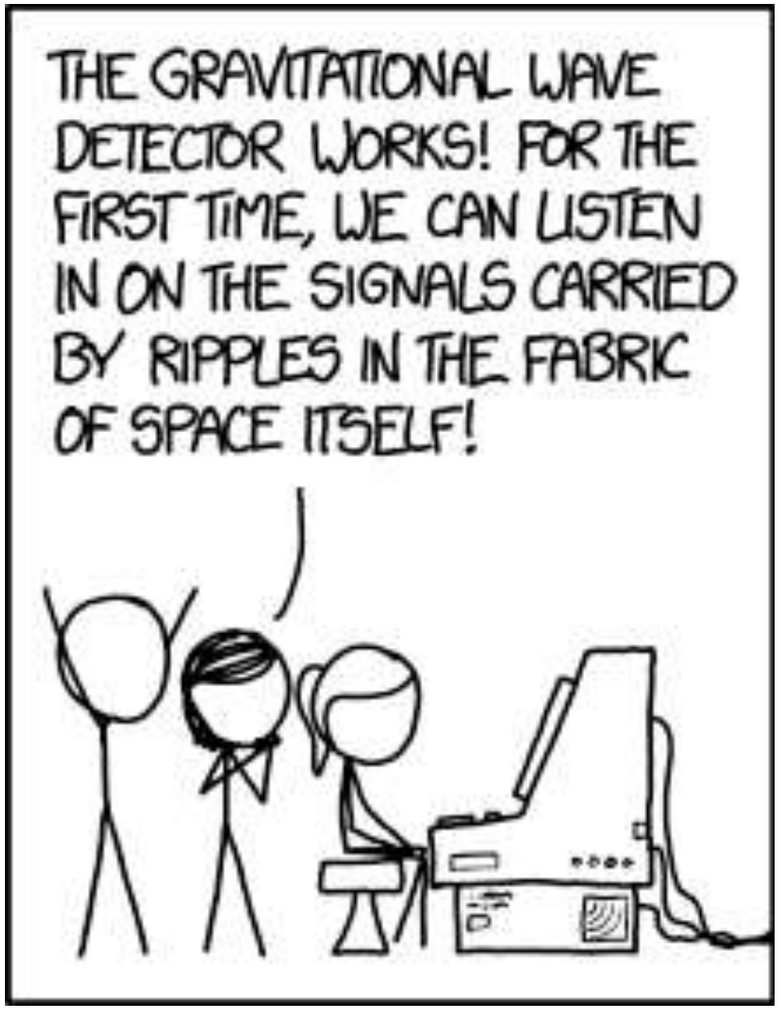
ID X.

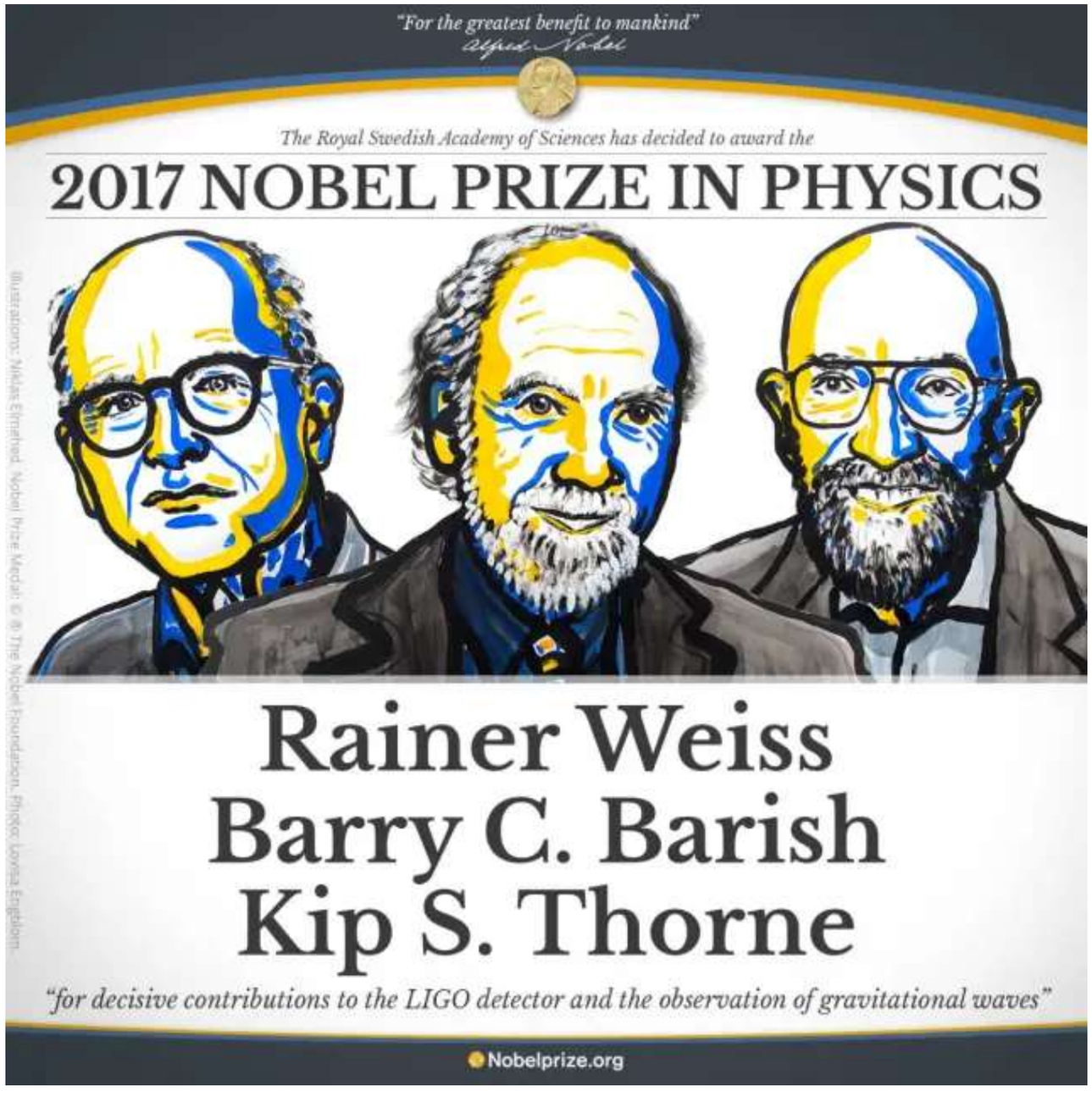




# Ans.

## X = Gravitational waves



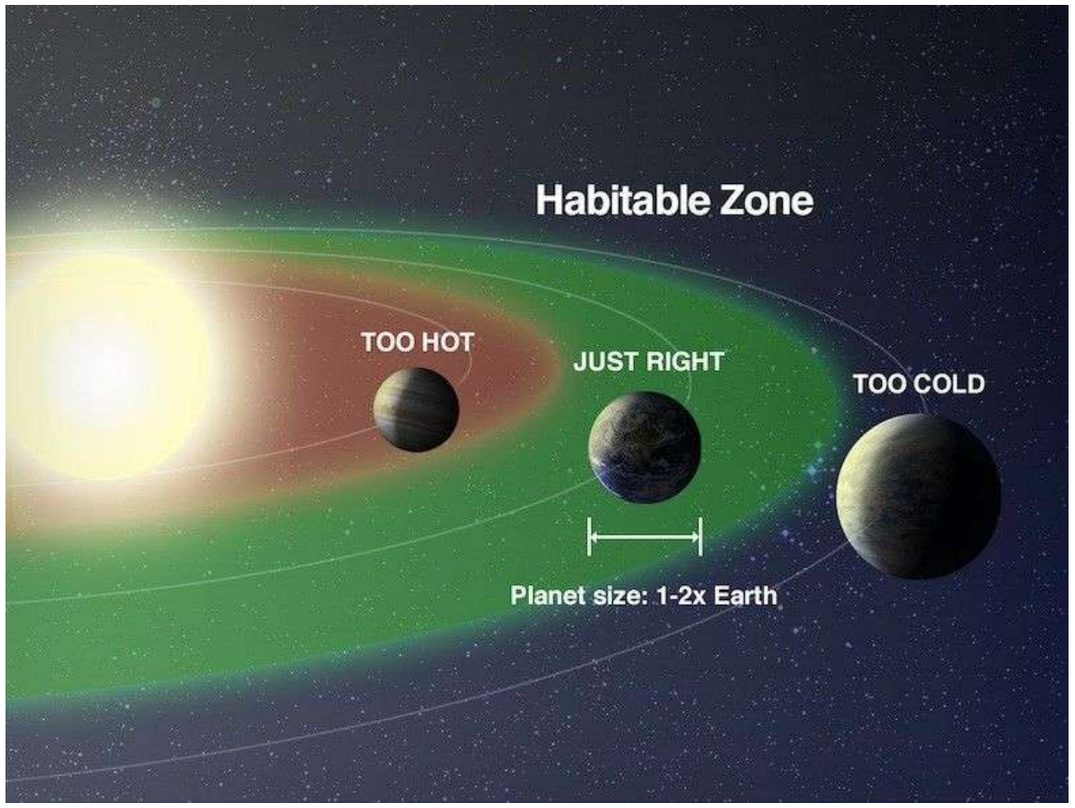



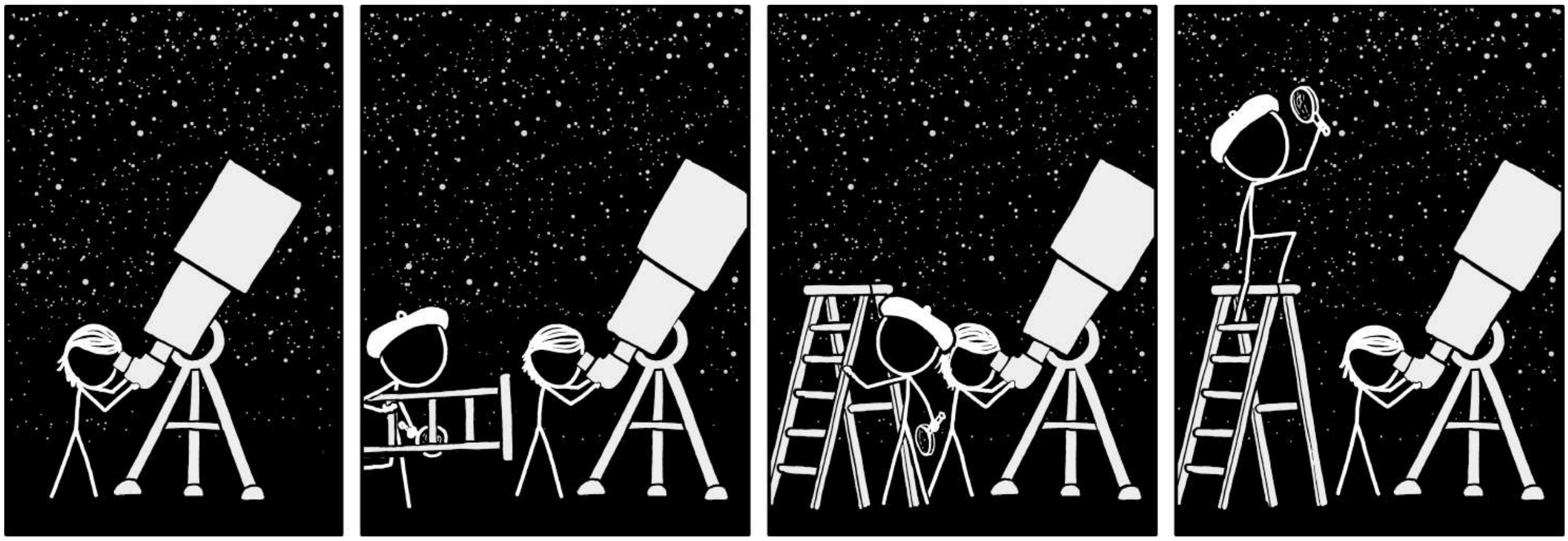
# Q.

The definition of a “habitable zone” is the distance from a star at which liquid water could exist on orbiting planets’ surfaces. Not too far from the star to be ice, not too close to be steam.

Habitable zones are also called _____ zones, taking inspiration from a popular children’s fairy tale.

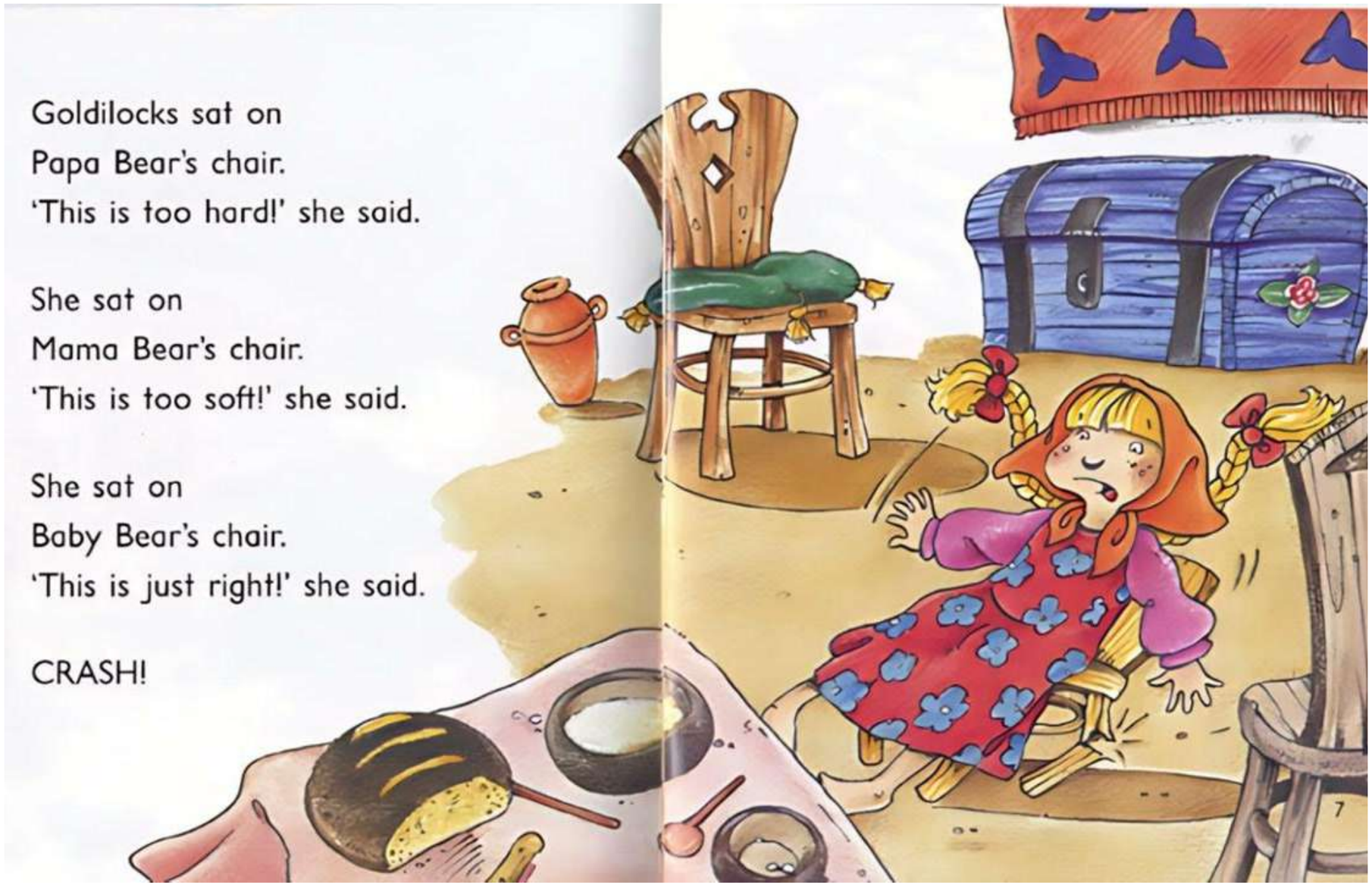
FITB.





# Ans.

## “Goldilocks” zone



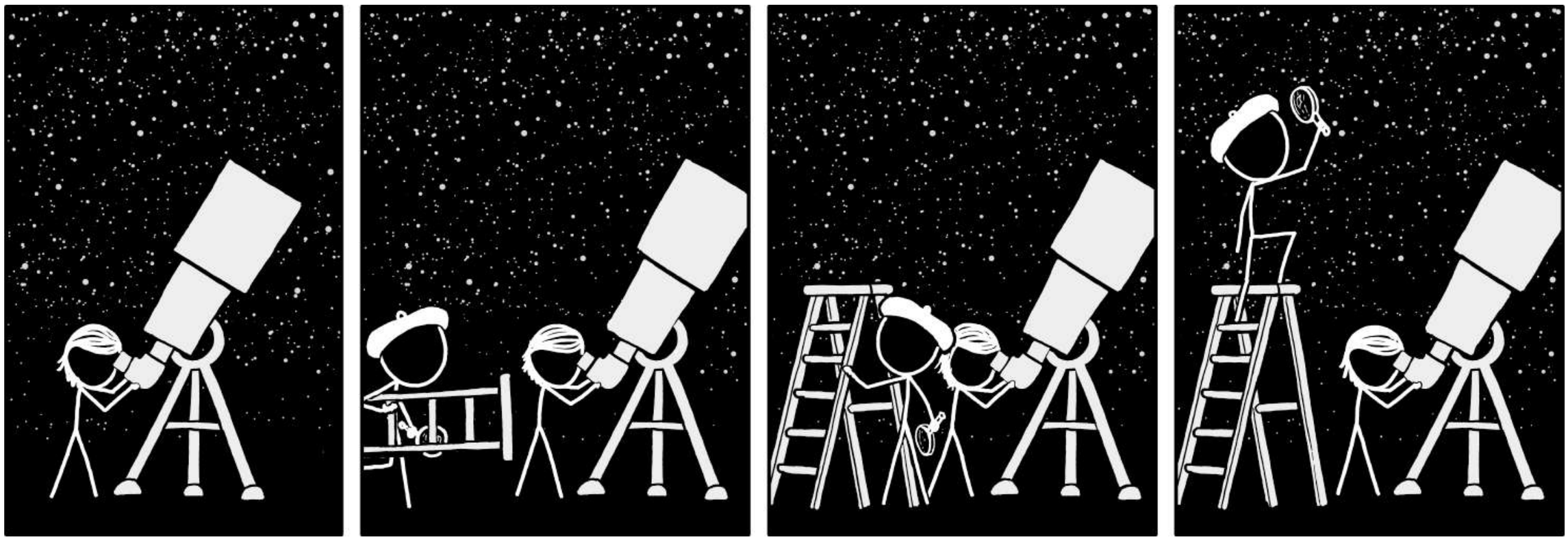
# Q.

**Zodiacal light** is a faint glow of diffuse sunlight scattered by interplanetary dust.

It was the subject of **X**'s Ph.D. thesis, as discussed on its Wikipedia page.

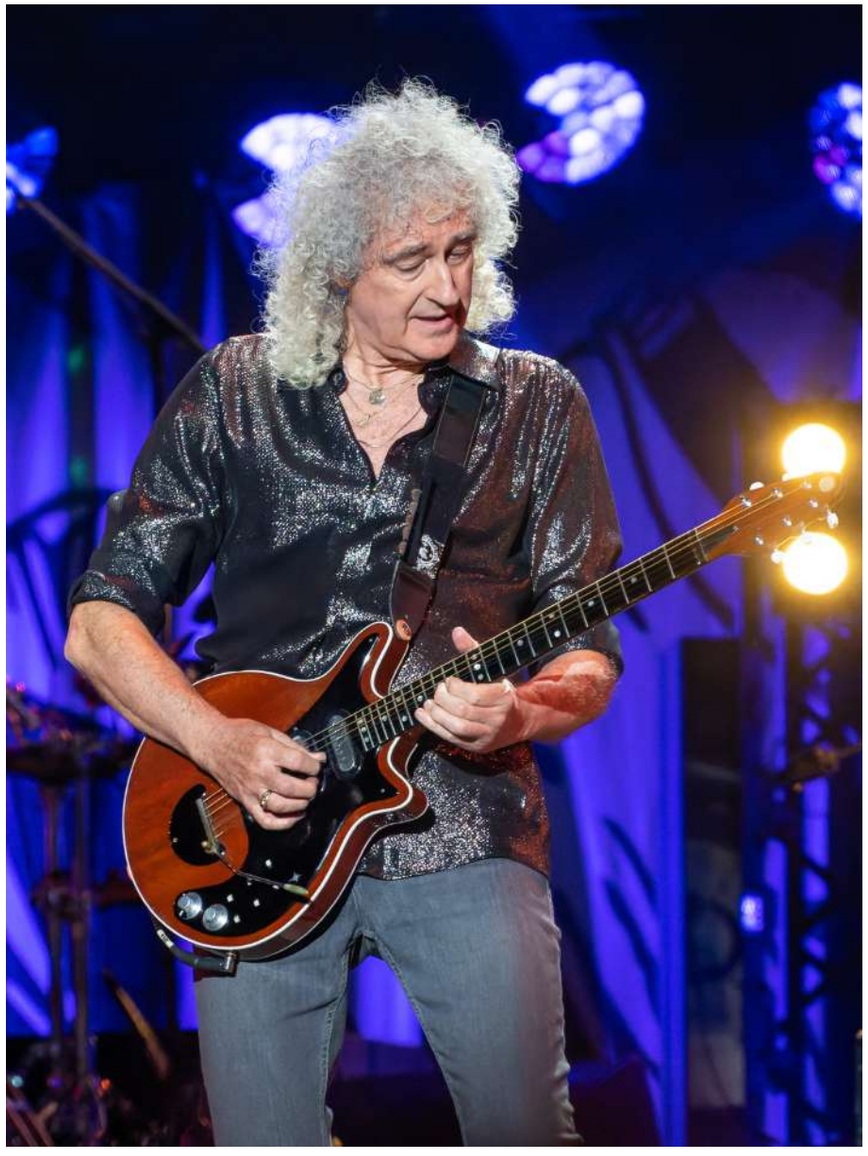
# ID **X**.

In 2007, [redacted] lead guitarist with the band [redacted], completed his thesis, *A Survey of Radial Velocities in the Zodiacal Dust Cloud*, thirty-six years after abandoning it to pursue a career in music.[32] He was able to submit it only because of the minimal amount of research on the topic undertaken during the intervening years. [redacted] described the subject as being one that became "trendy" again in the 2000s.[33]



# Ans.

## Brian May (Queen)

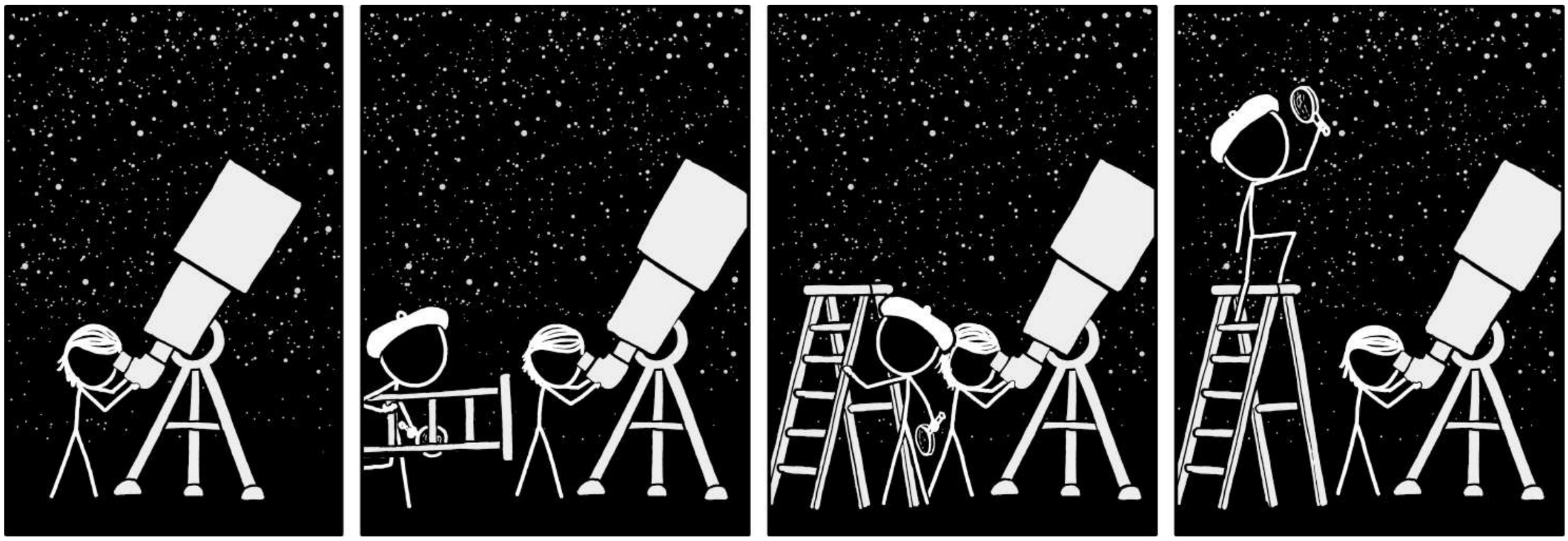




# Q.

These are the **glass igloos** of Finland. What is their purpose?





# Ans.

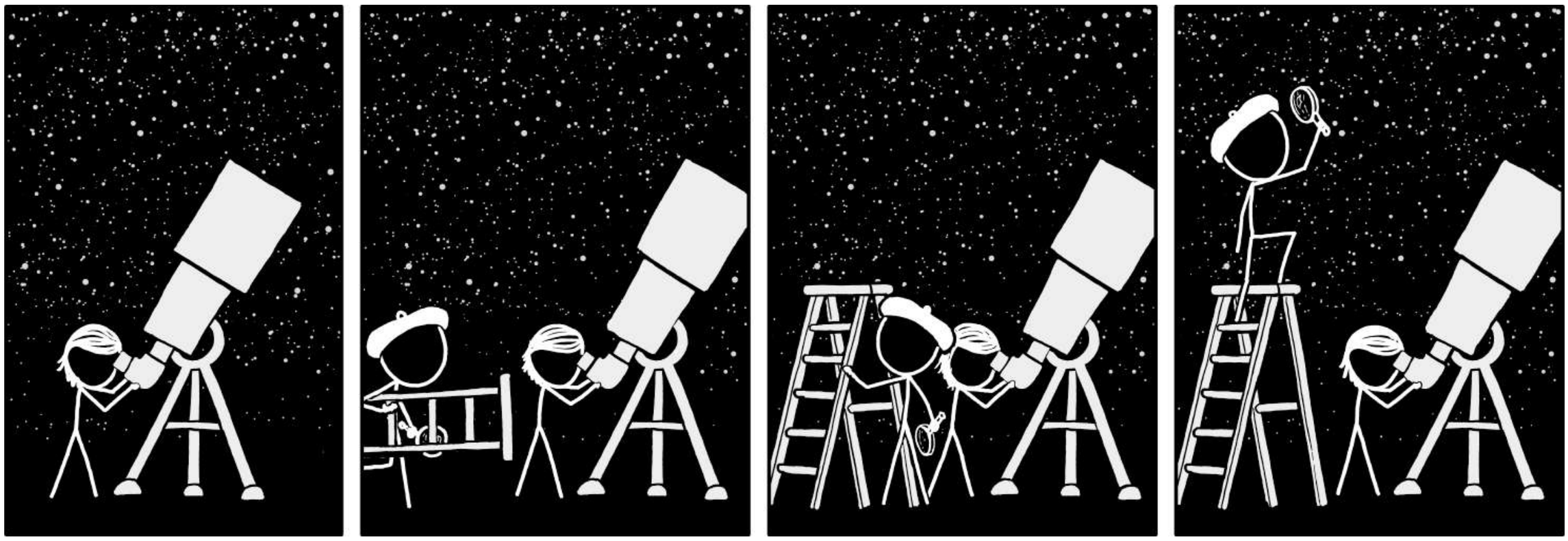
## To see the Northern Lights



# Q.

FITB.


Nice store. How do you keep the floors so clean?
Oh, we hired this dude named [redacted] he's really good Hard worker. Doesn't mind the monotony. Sweeps out the same area every night.



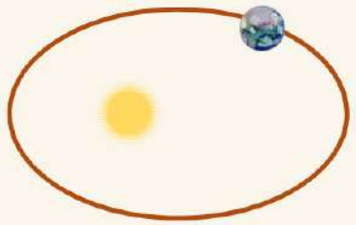
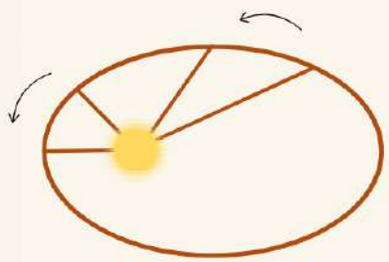
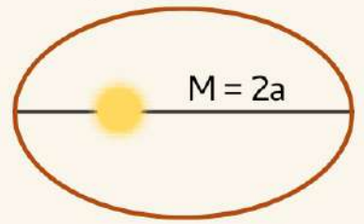
# Ans.

## Kepler




### Kepler's Laws of Planetary Motion



| First Law | Second Law | Third Law |
|---|---|---|
|  ellipse |  | P: period (time for one cycle)<br>2a: length of major axis<br><br>$P^2 \propto a^3$ |
| Planets orbit in ellipses with the Sun at one focus. | Planets sweep out equal areas in equal times. | The square of the orbital period is proportional to the cube of the semi-major axis |

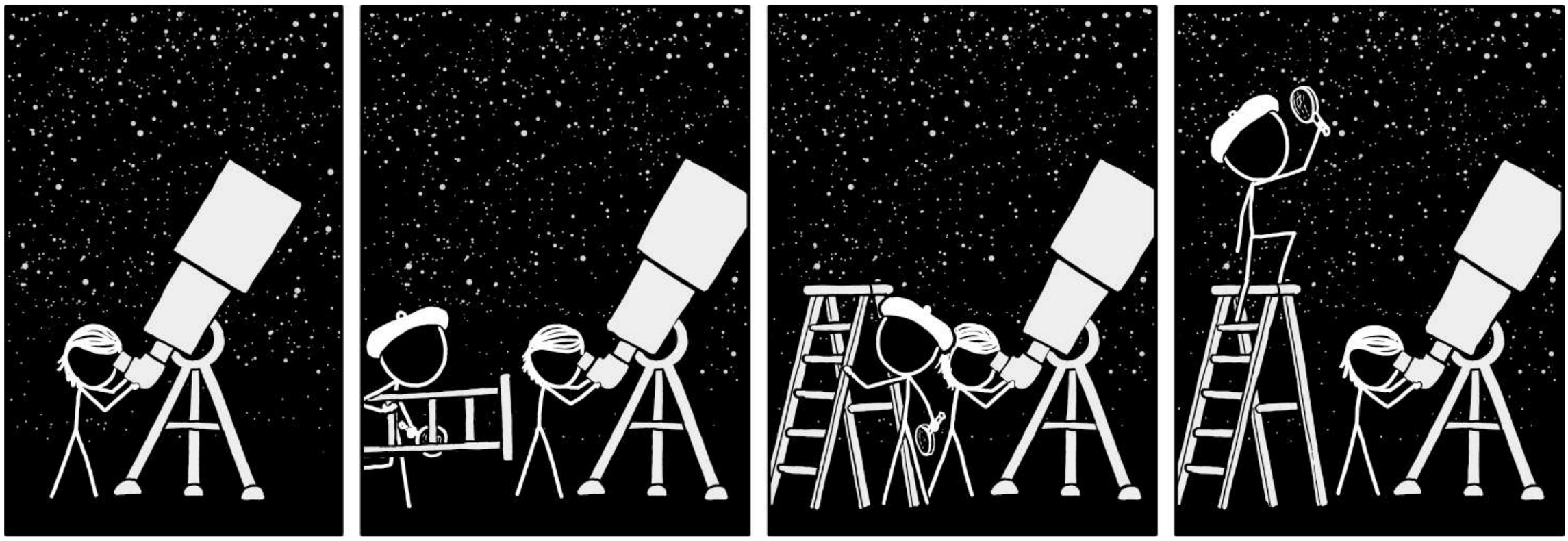
sciencenotes.org

# Q.

The *Remembrance of Earth's Past* trilogy has its first two books named after astrophysical concepts.

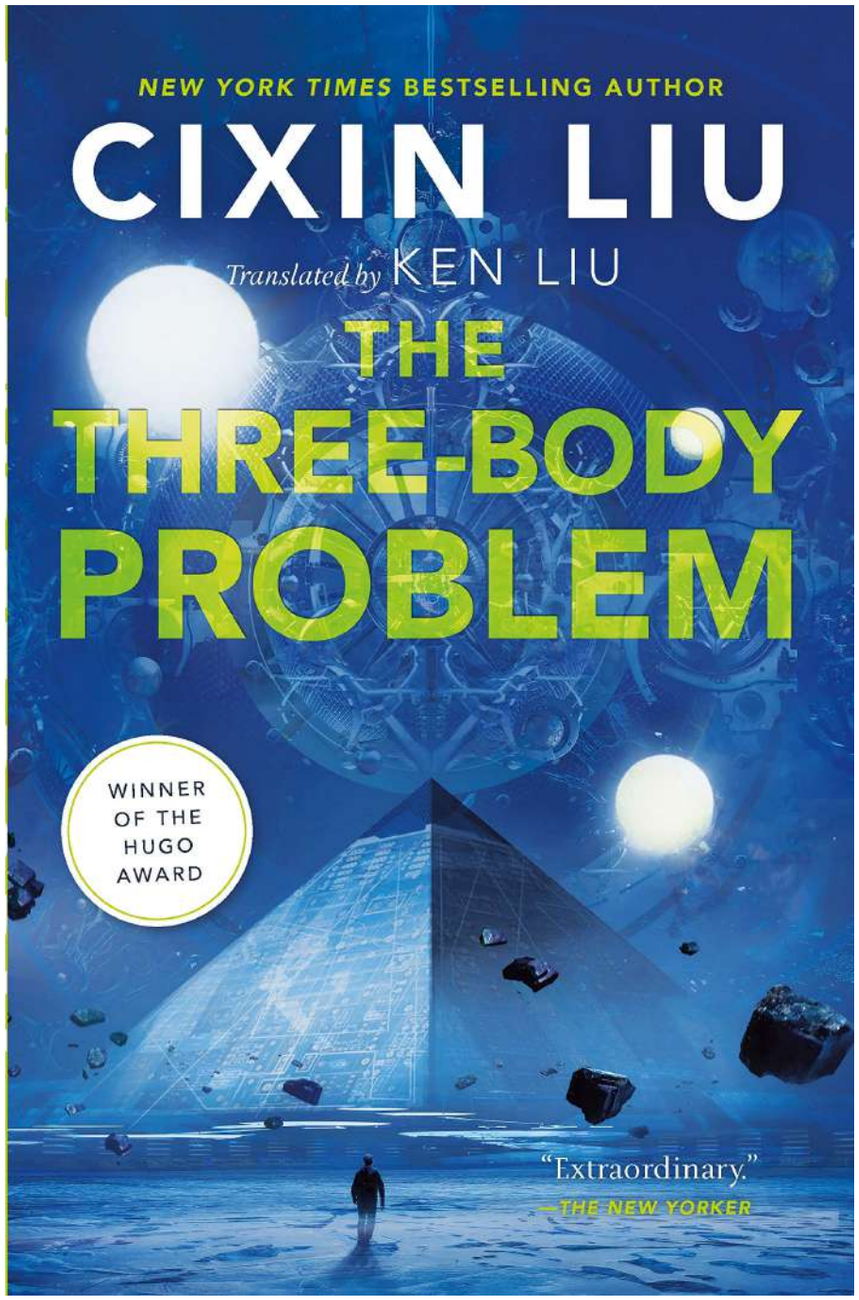
The **first book** is named after a notorious orbital mechanics problem for which no general closed form/analytical solution exists.

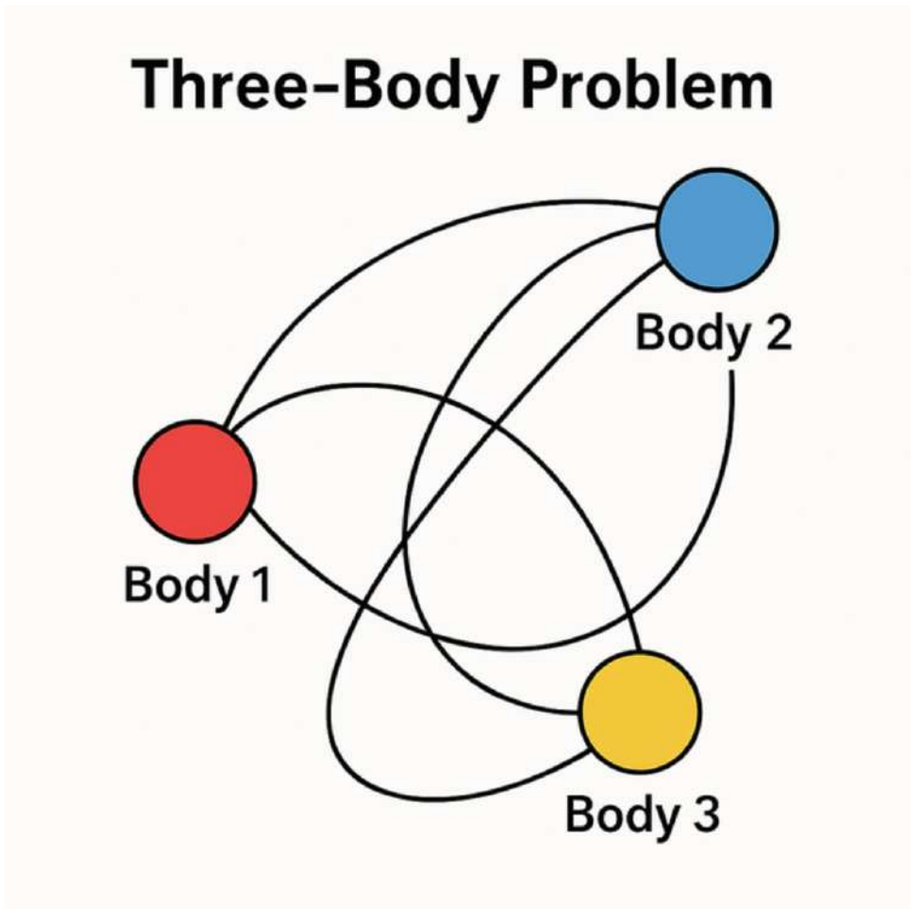
Name the book, which was recently adapted to a TV series.



# Ans.

## The Three Body Problem

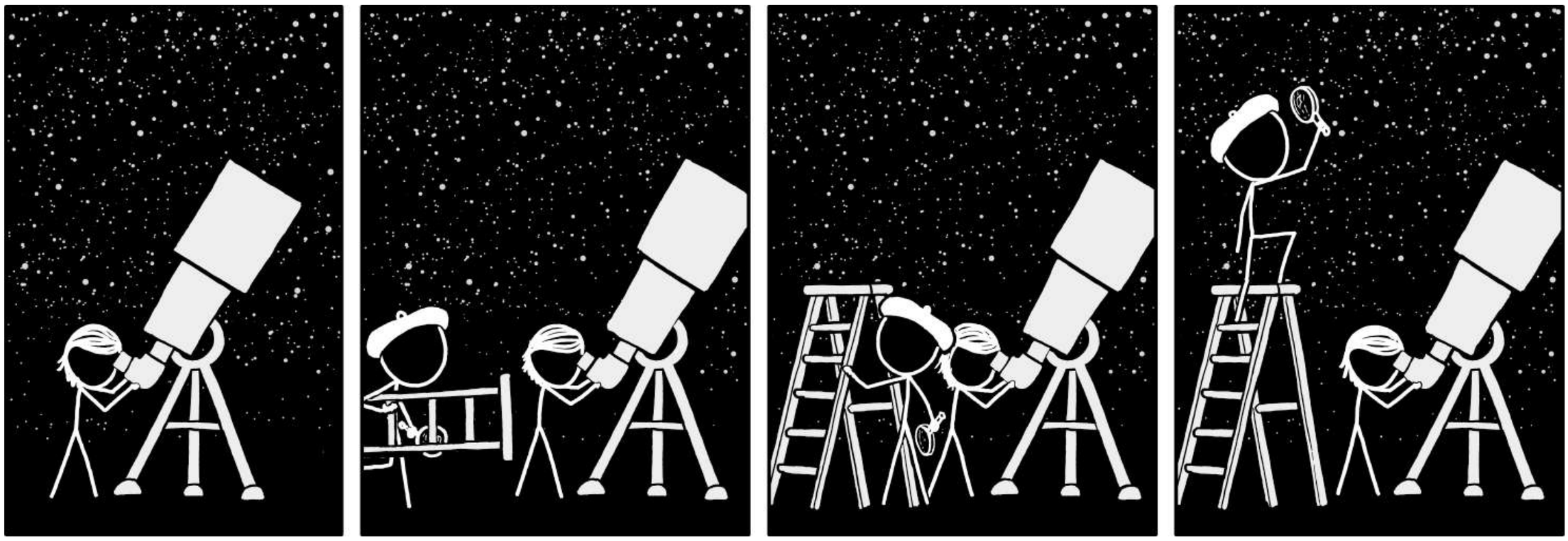


# Q.

What is special about this picture?





# Ans.

**The first drawing done in space**

**The view of sunrise as seen from space, sketched in 1965 by Russian cosmonaut Alexei Leonov (the first person to conduct a spacewalk)**

