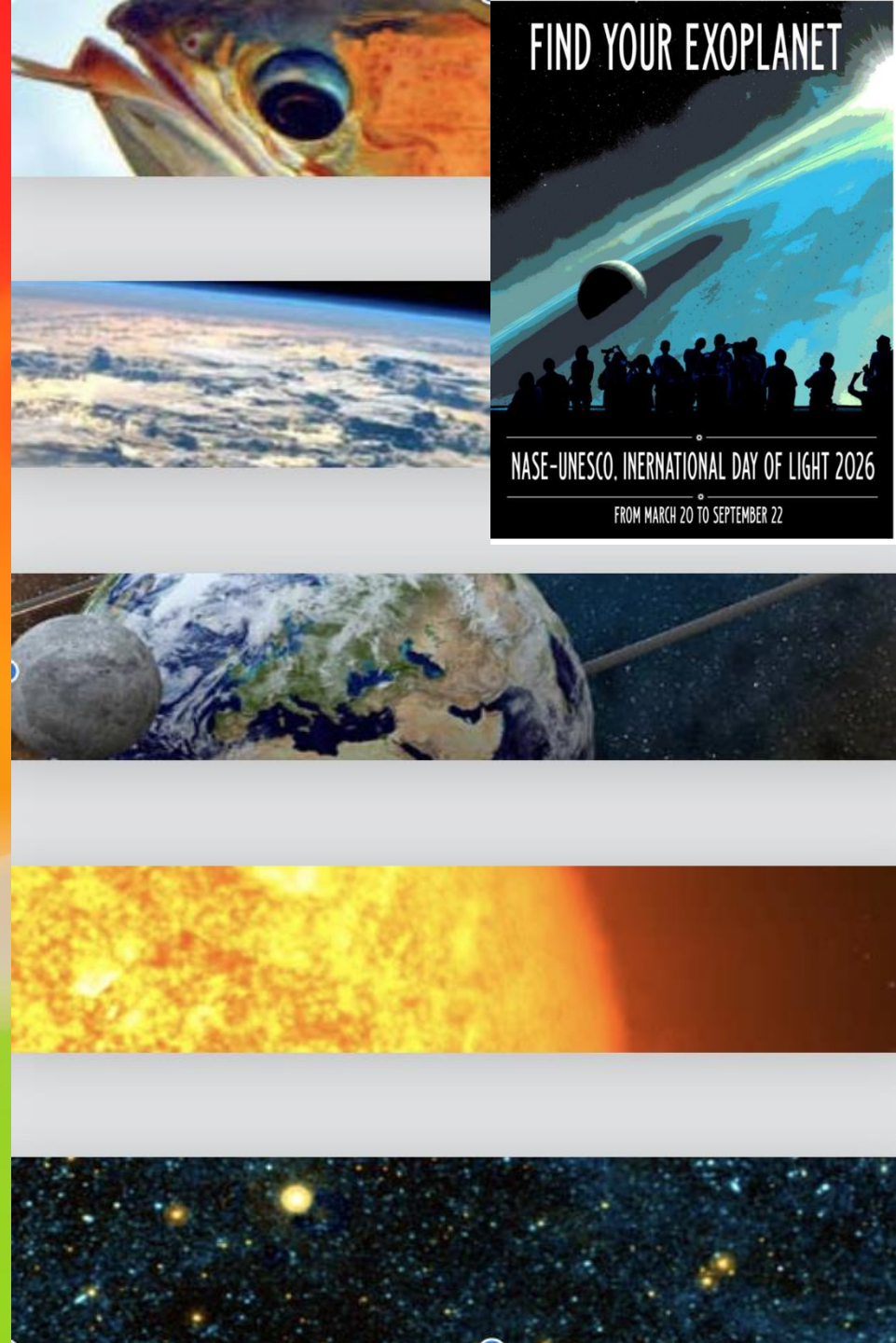


Life in extreme conditions, in search of a second Earth!

Dr Margarita Metaxa

**NOC for Greece
OAO, IAU**



FIND YOUR EXOPLANET

NASA-UNESCO, INTERNATIONAL DAY OF LIGHT 2026

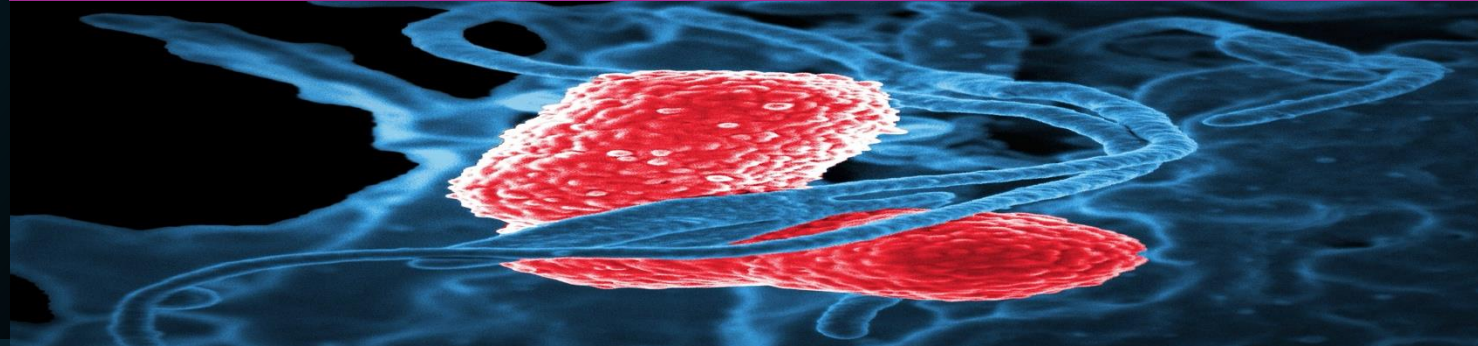
FROM MARCH 20 TO SEPTEMBER 22

Core questions

How does life begin and evolve?



Does life exist elsewhere than Earth?



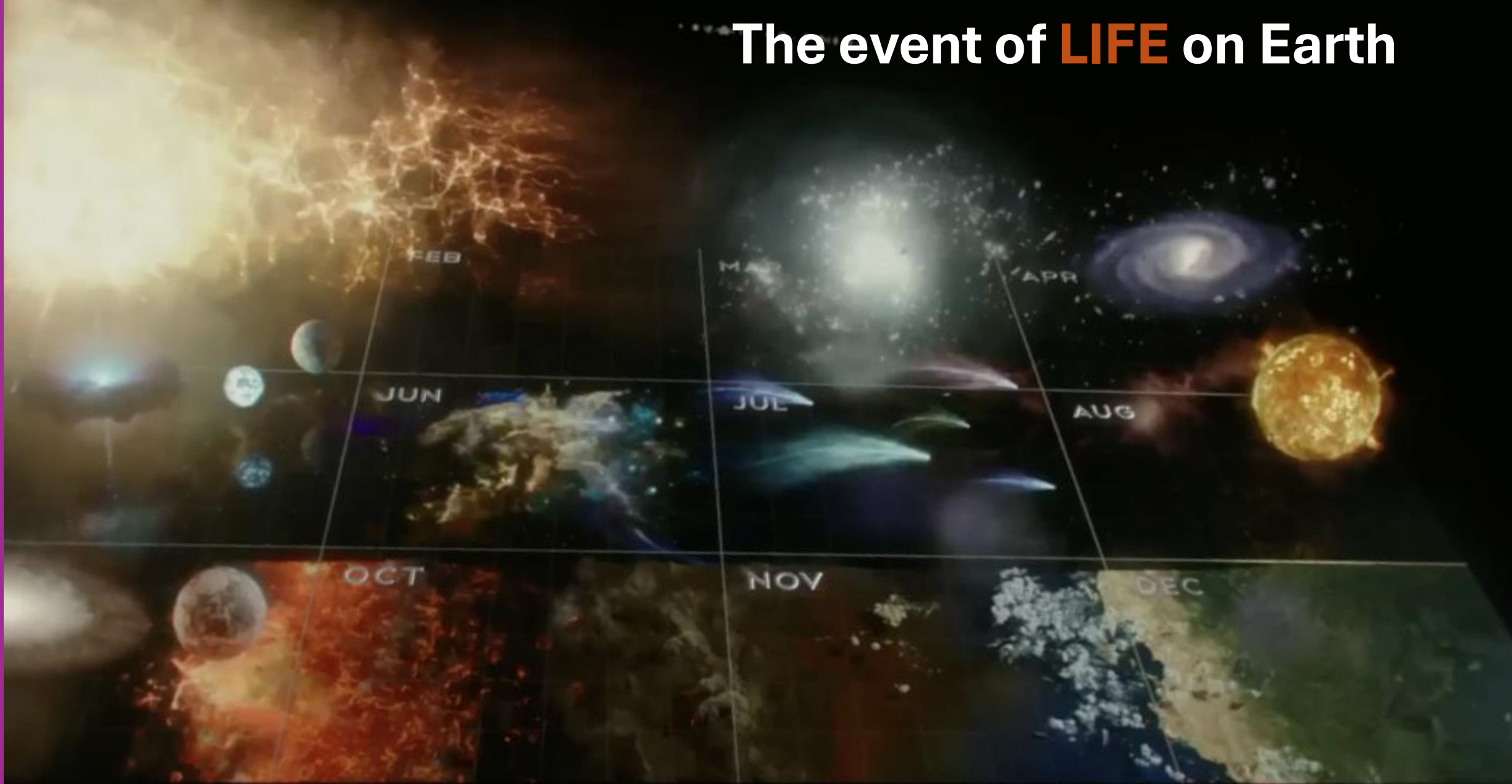
How can we find life in the Universe?



Astrobiology

**is an interdisciplinary
scientific field**

The event of **LIFE** on Earth



How did life begin and evolve on Earth?

Looking in moons of other planets

Does life exist elsewhere?

Europa Icy moon (Δίας)

A global
subsurface
ocean
beneath the ice

Enceladus Icy moon (Κρόνος)

Water, Salts,
**Organic
molecules,**
Hydrogen gas
(H_2) → strong
evidence for
hydrothermal
vents

Titan

Λίμνες υδρογονανθράκου
(Κρόνος)

**Rich in organic
molecules**

**Complex prebiotic
chemistry in the
atmosphere**

👉 **Titan may
resemble early Earth
before life began.**



THE THANK YOU!! NUES

*«to explore strange new worlds,
to seek out new life and new civilizations,
to boldly go where no man has gone before»*

Star Trek, 1966-1969

FIND YOUR EXOPLANET



NASA-UNESCO. INTERNATIONAL DAY OF LIFESCIENCE

FROM MARCH 20 TO SEPTEMBER 22