



Welcome to the

inSpiring SCIENCE
education

SUMMER SCHOOL 2016

Facebook Page: www.facebook.com/esea.eu

Facebook Group: European Science Education
Academy (ESEA)

Twitter: @esea_eu

#ISE2016

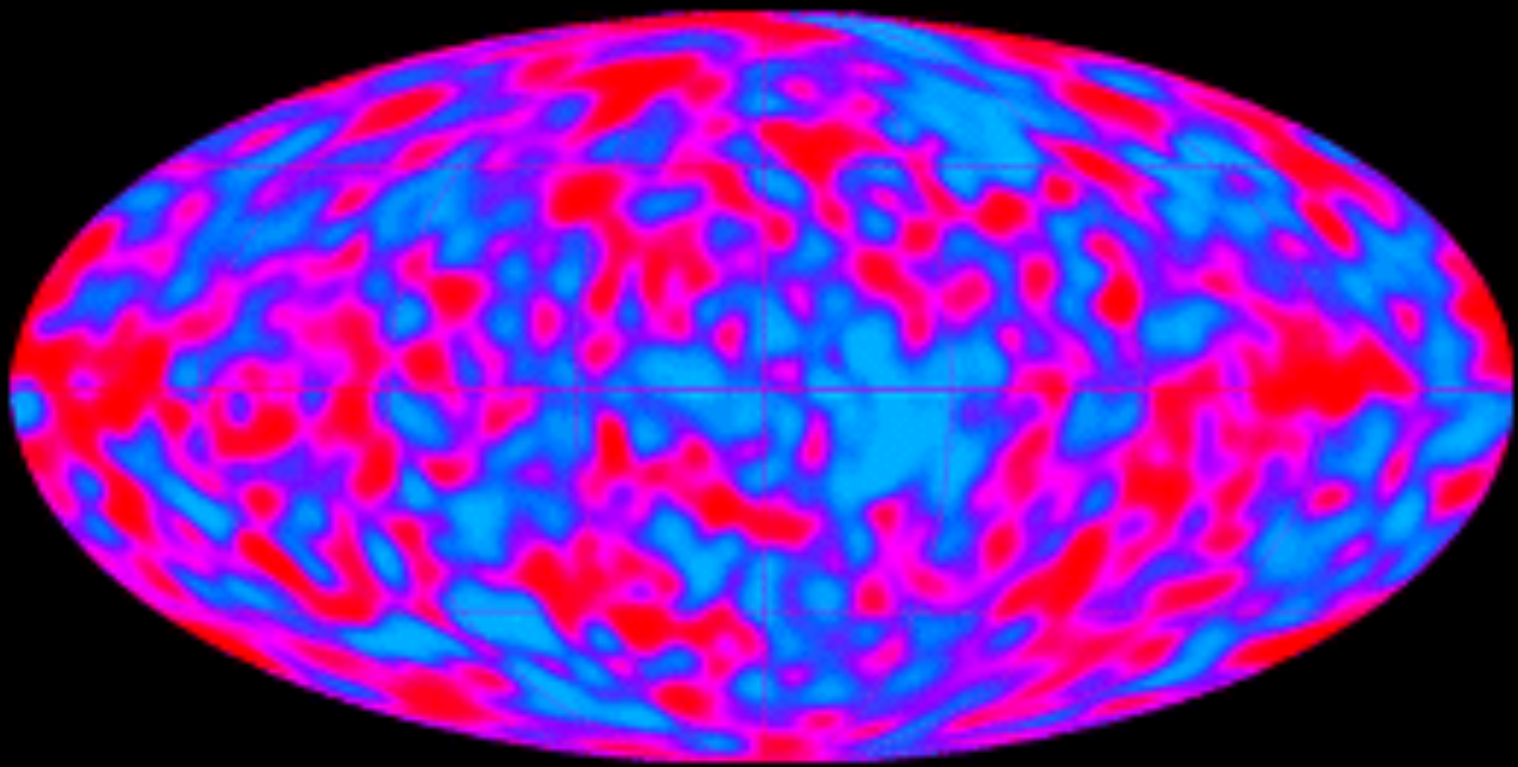


**A LONG
TIME AGO**

**ONCE
UPON A
TIME**

**13.8 billion
years ago**

The History of our Observable Universe Begun



Among Many Galaxies

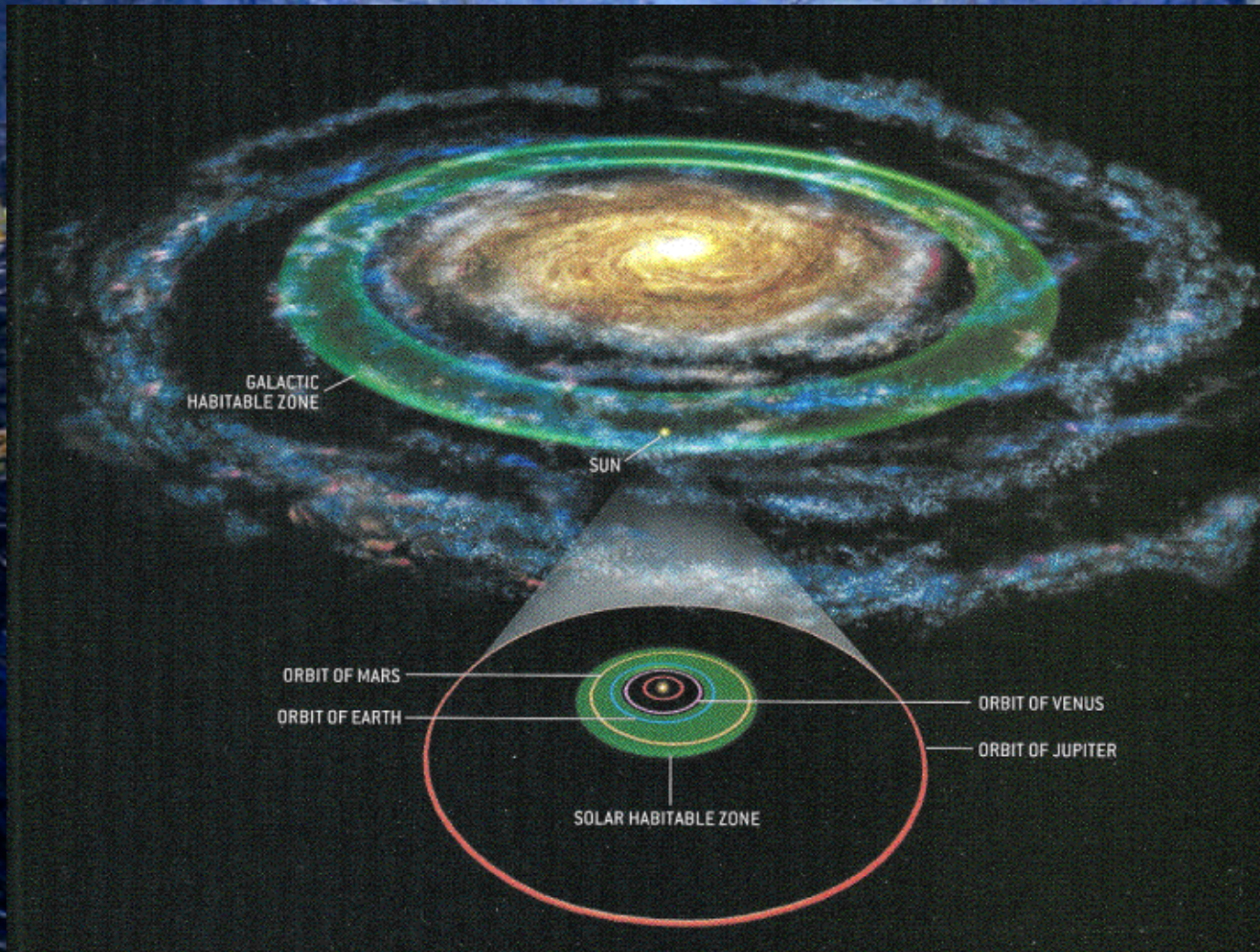


The beautiful Milkyway

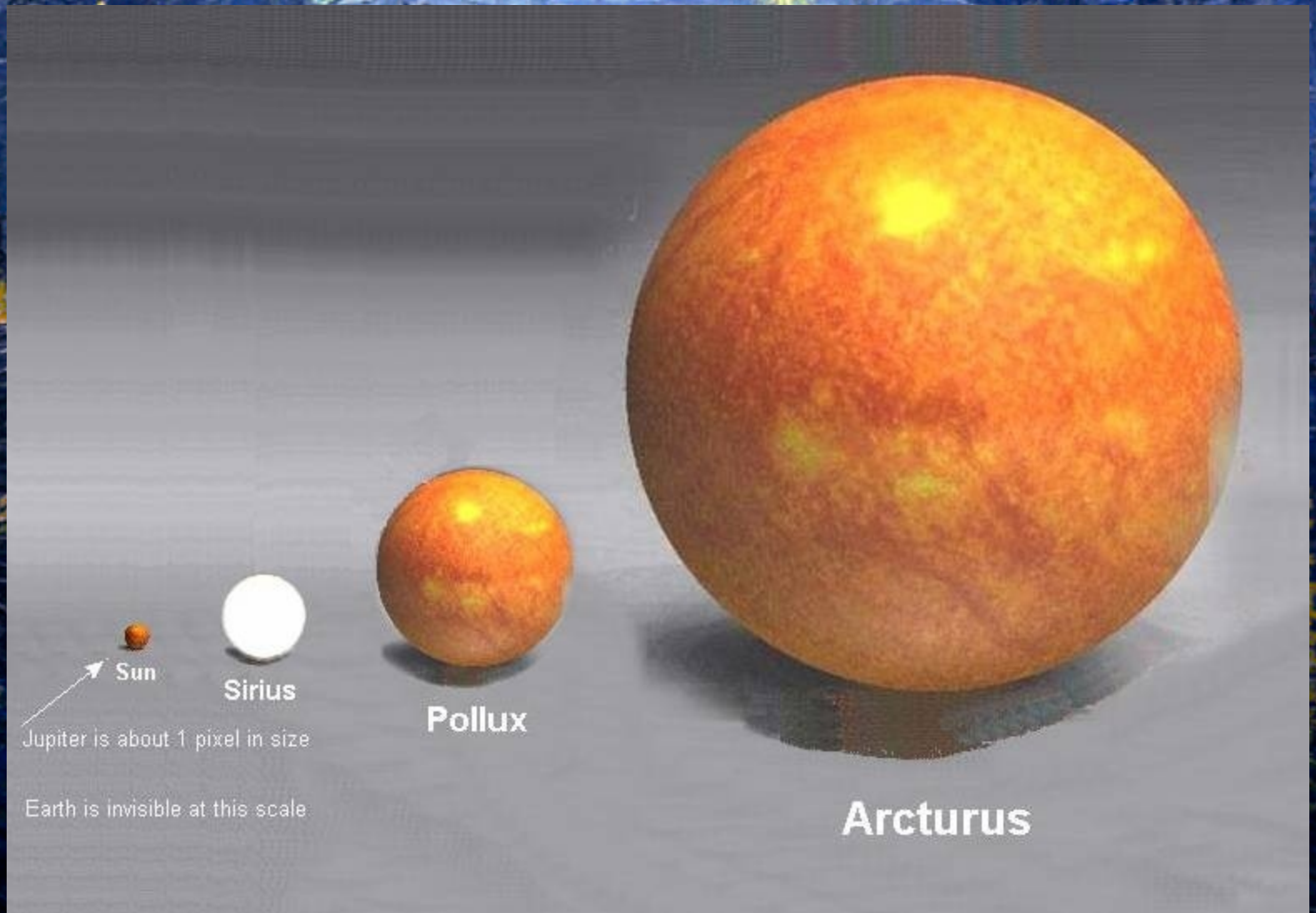


© Mark A. Garlick / space-art.co.uk

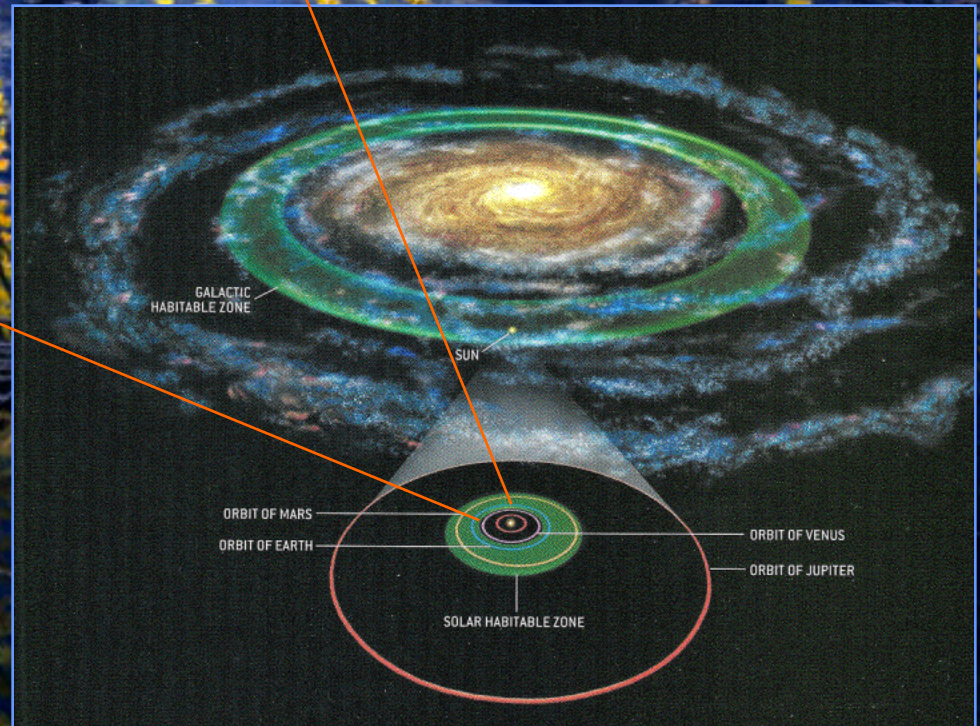
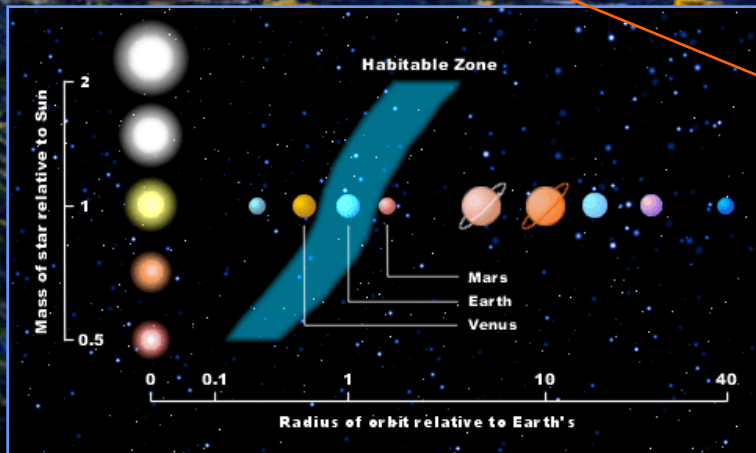
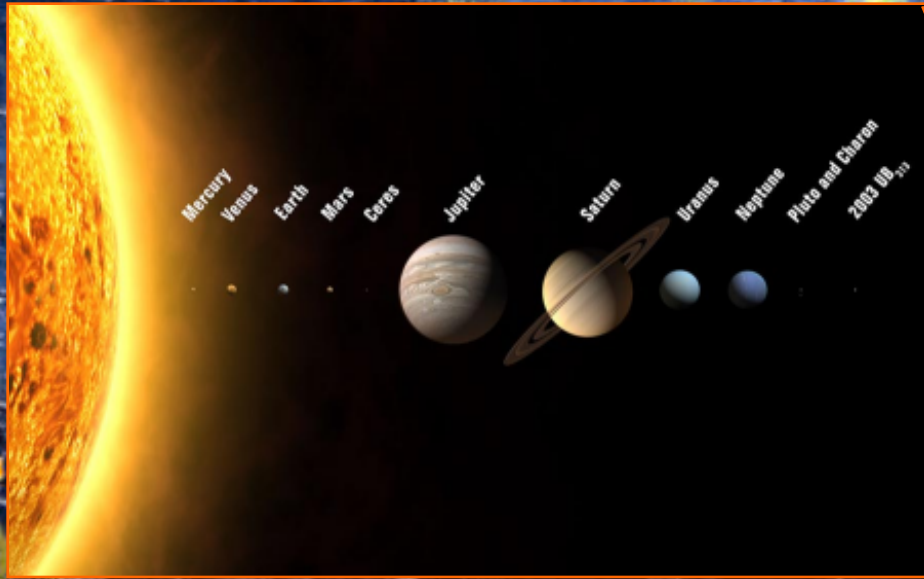
In a special corner



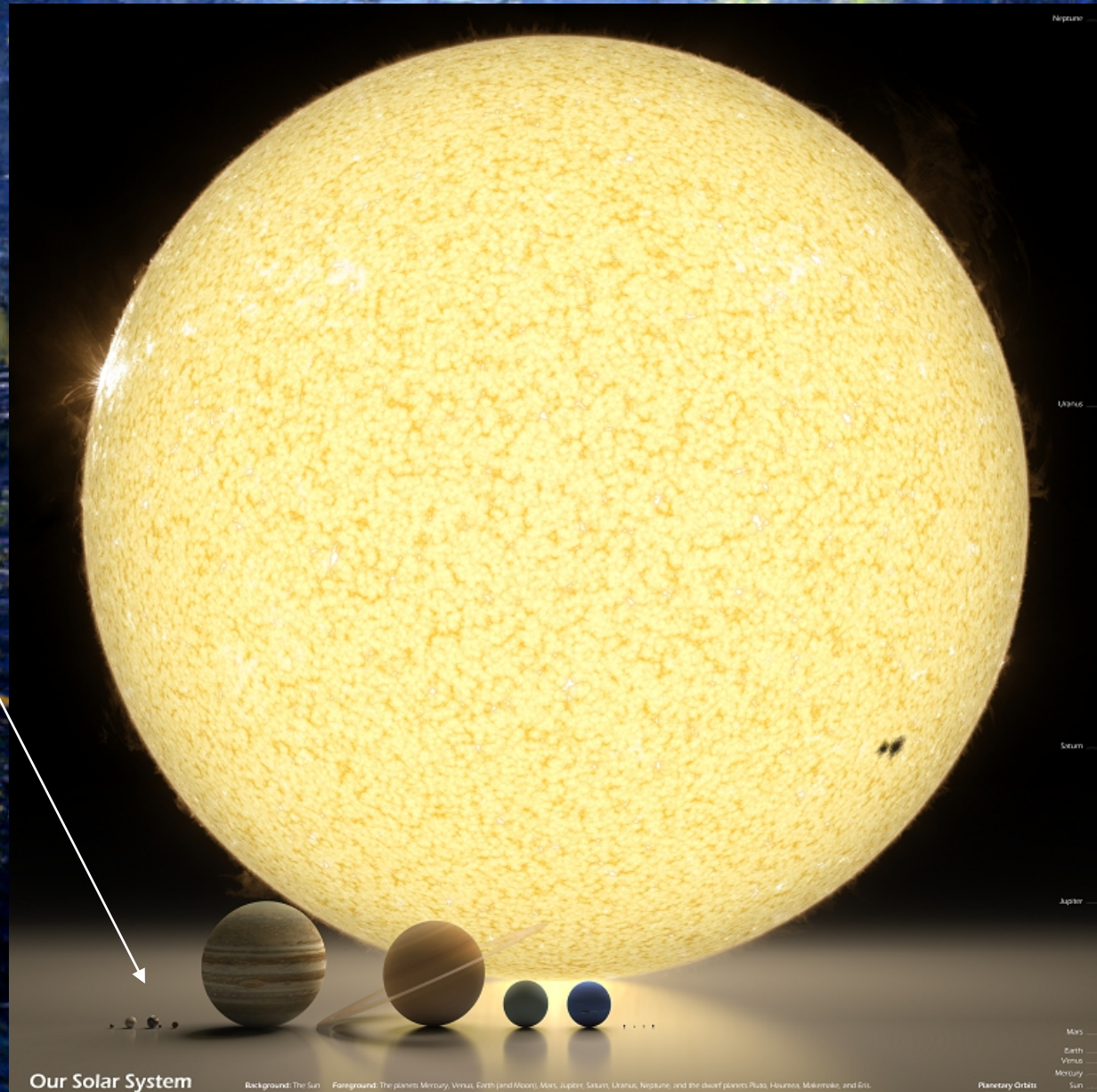
Around a small star

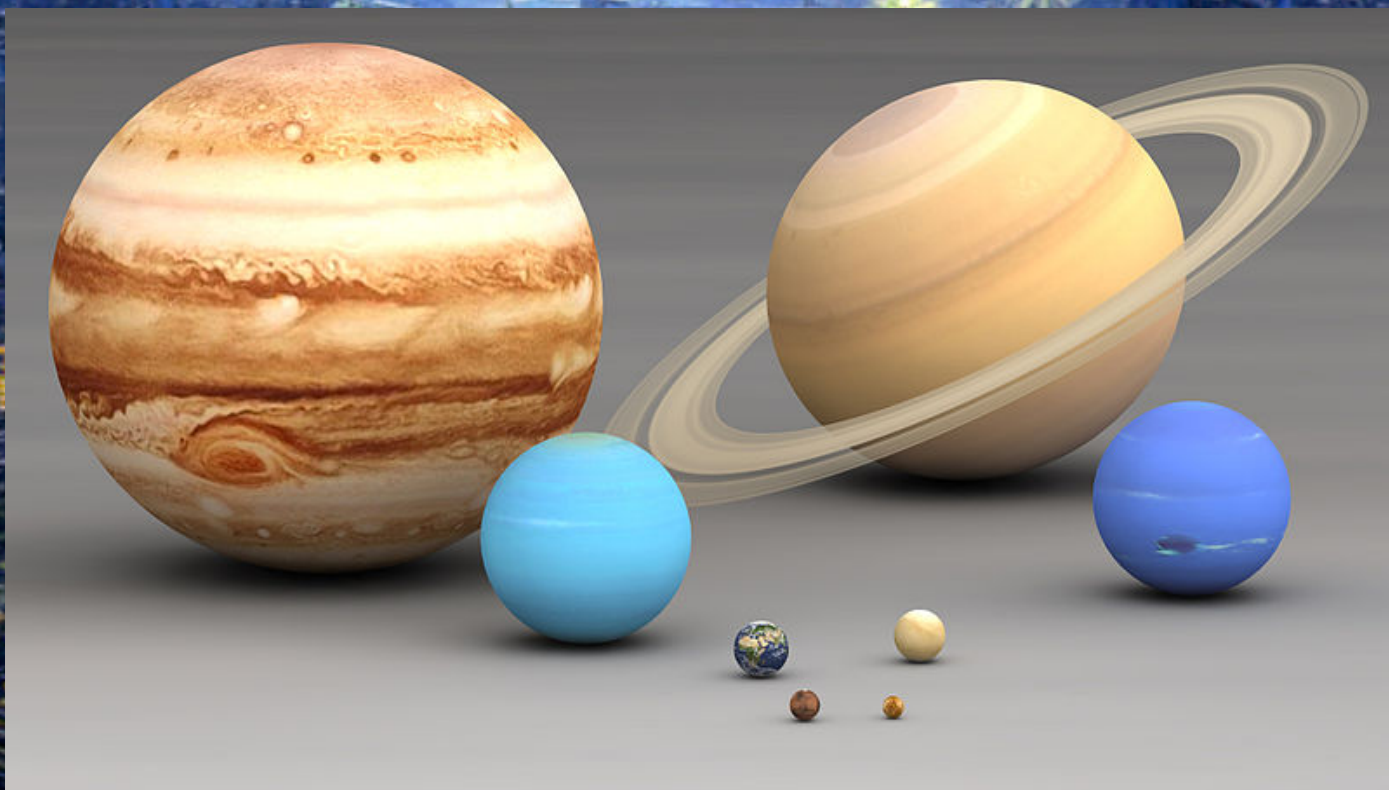


In the Habitable Zone of a Star

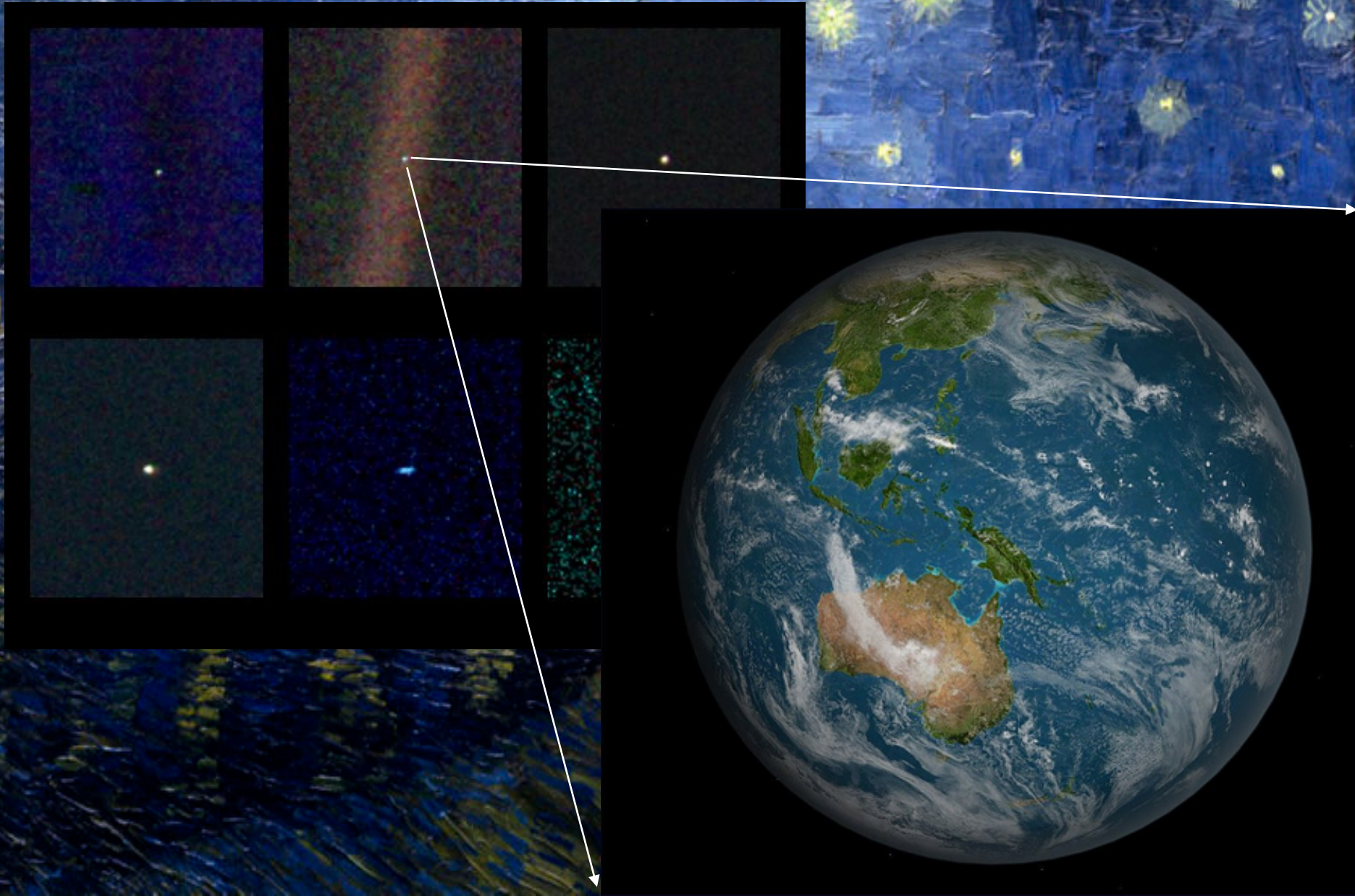


A special place appears !!

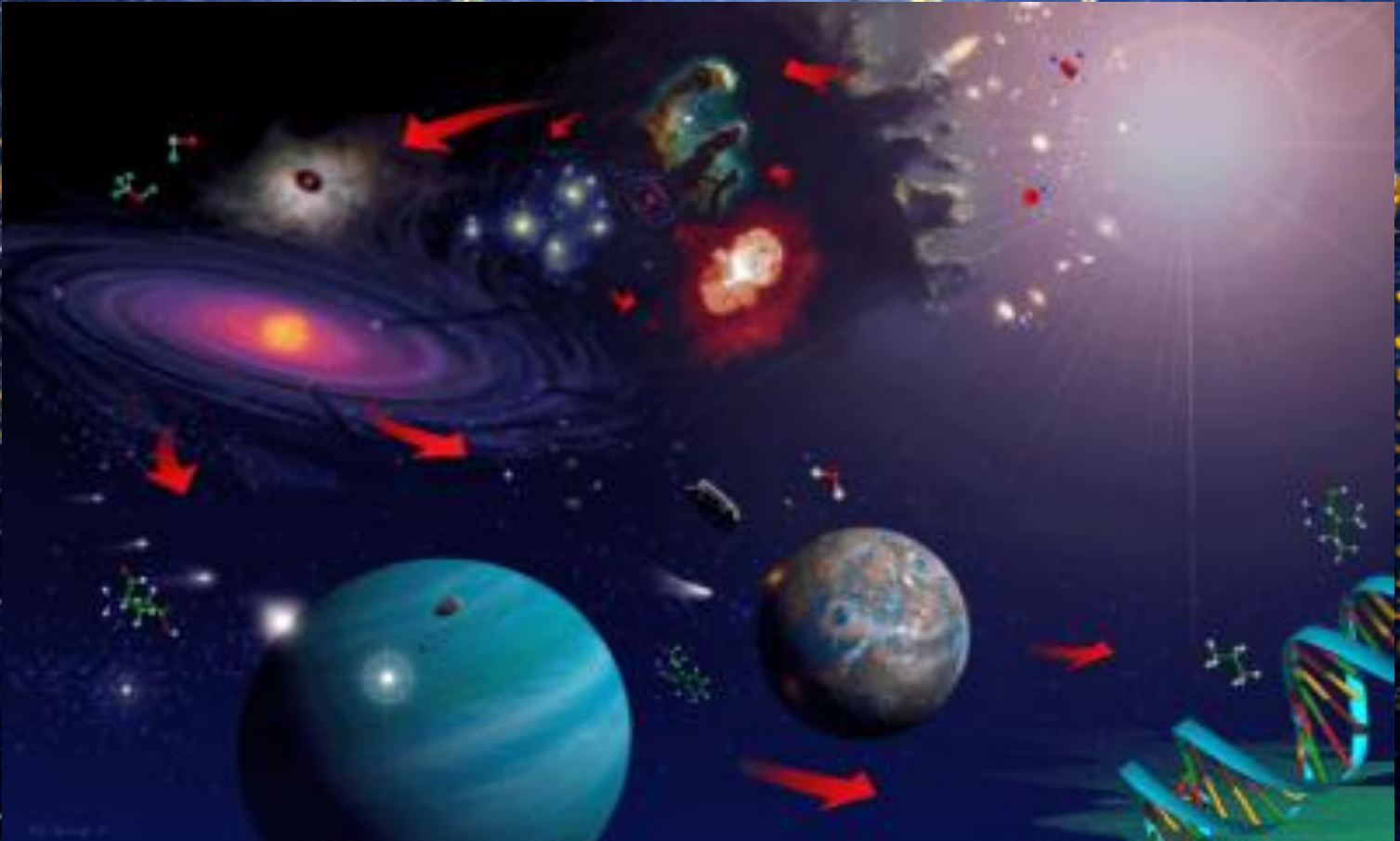


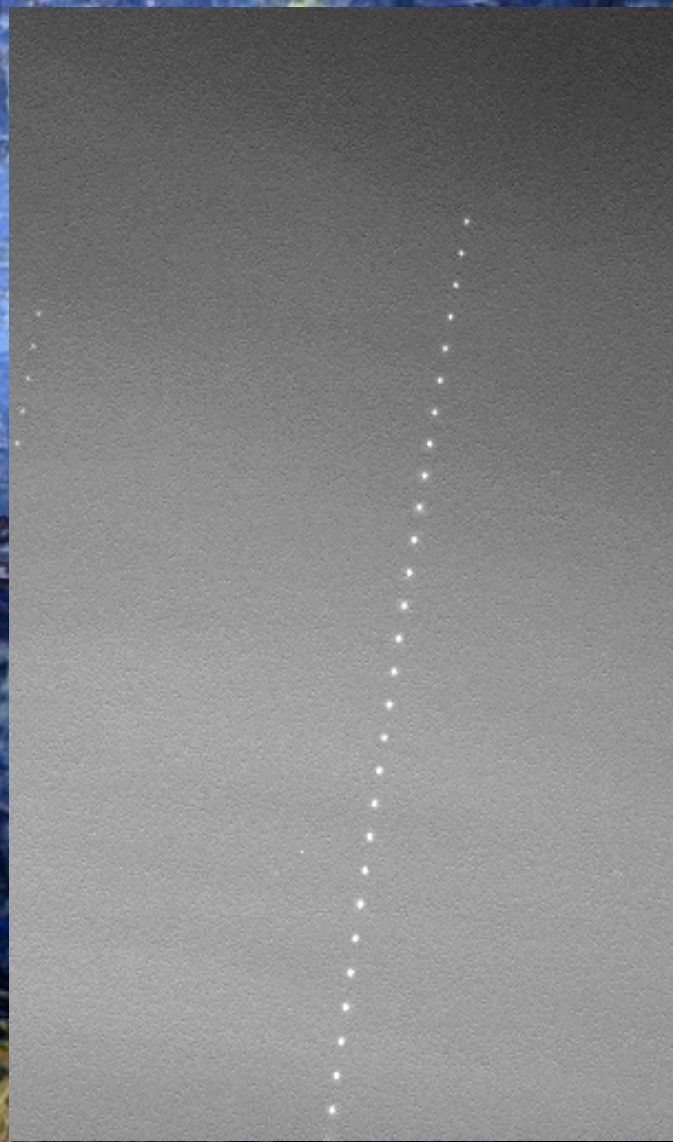
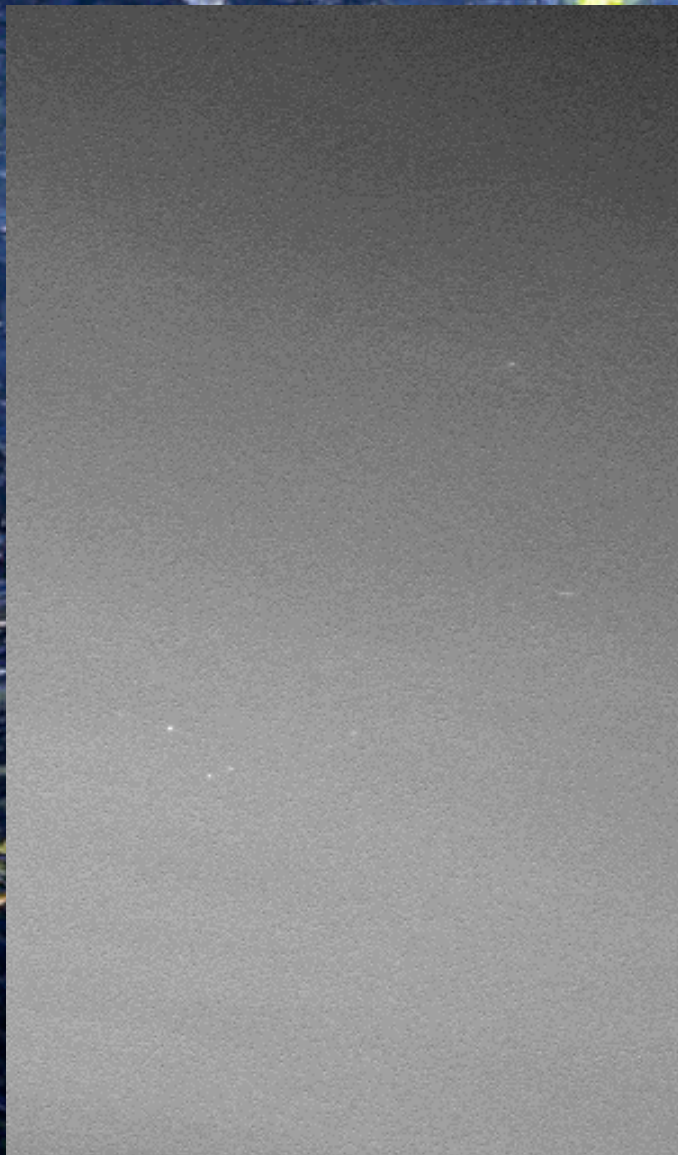


A pale blue dot

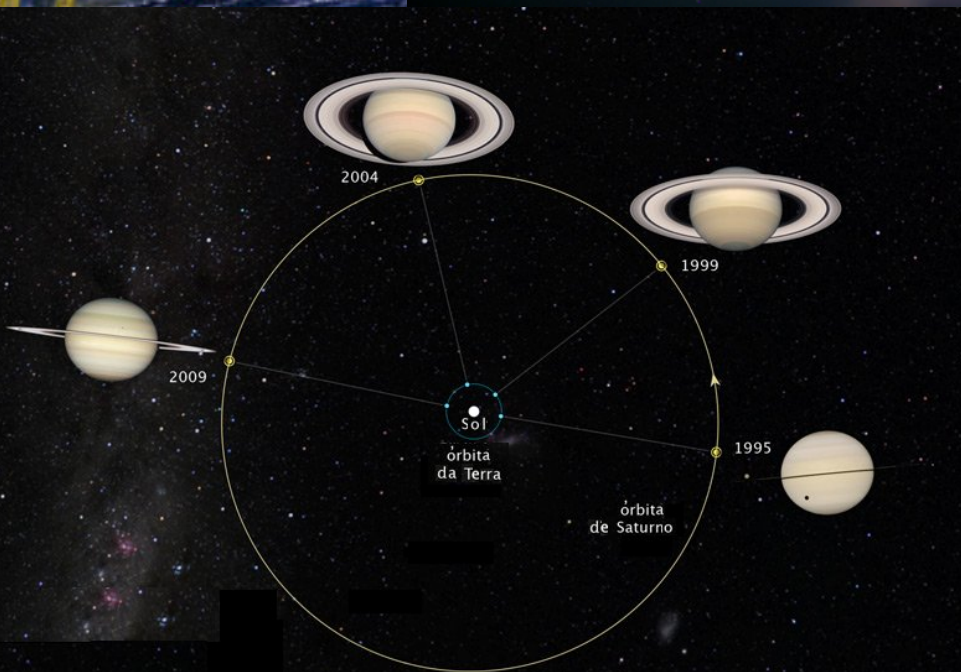


Life Emerged





**Where humans appeared and some of them
capable of amazing things**



The image is a composite. The upper half shows a night sky filled with stars and the Milky Way galaxy, which appears as a bright, hazy band of light. The lower half shows a landscape at night, featuring dark, silhouetted mountains and a calm lake that reflects the light from the sky. The overall mood is serene and majestic.

In a beautiful planet,
with beautiful skies and
amazing living beings

© Miguel Claro

People started to forget what it is
to “Be Human” !!



We lost our stars



We lost our curiosity !!

WHAT IS TIME?

WHERE ARE THE GALAXIES EXPANDING TO?

WHAT WAS THERE BEFORE?

WHY ARE WE HERE?

WHAS THERE A BEFORE?

WHAT IS THE SIZE OF THE UNIVERSE ?

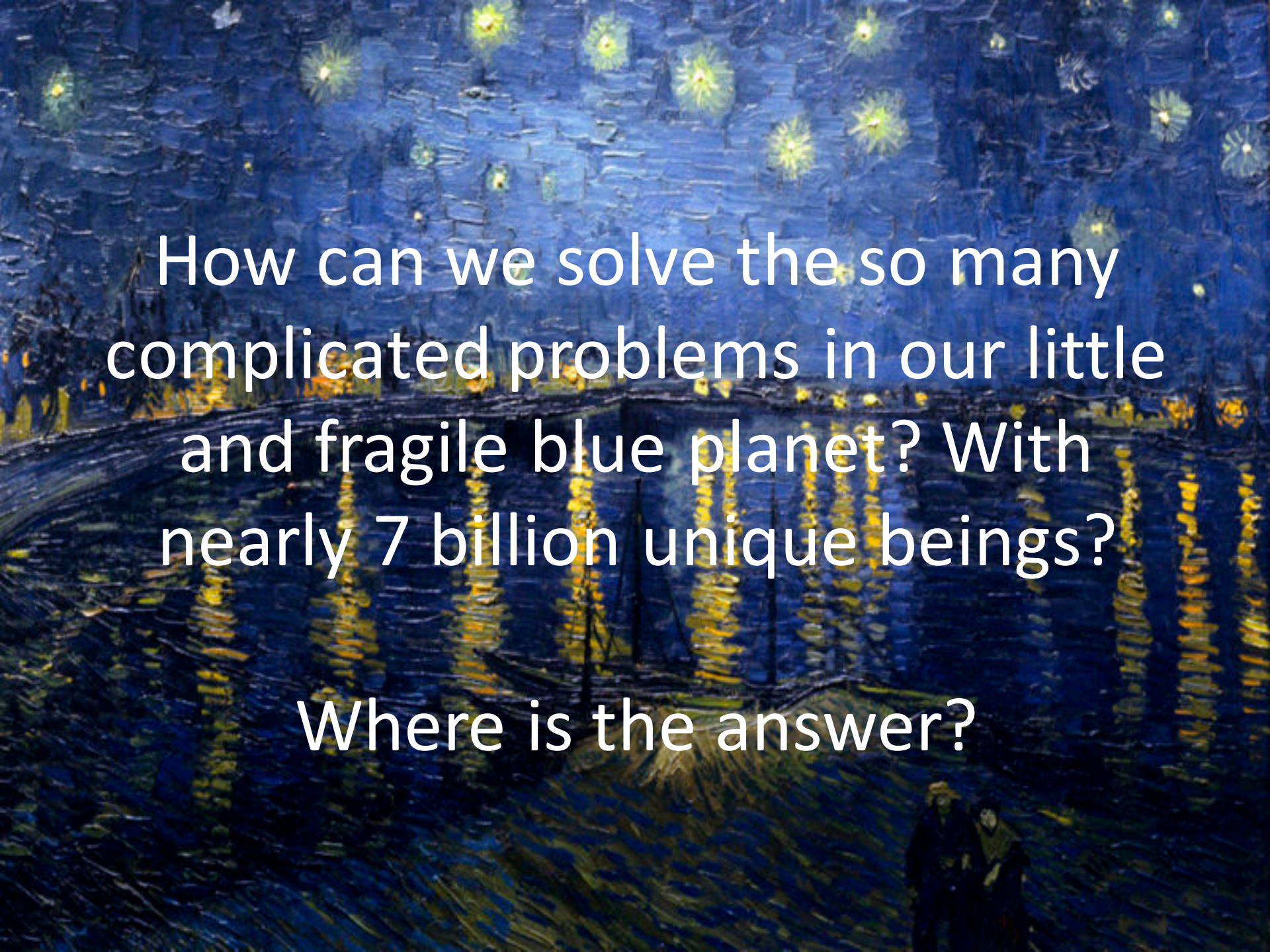
WHAT IS THE CONSTITUTION OF MATTER?

**IS THERE LIFE IN THE UNIVERSE
BEYOND EARTH?**

**WHAT IS THE ORIGIN OF OUR
UNIVERSE?**

So many think they found the
center of the Universe



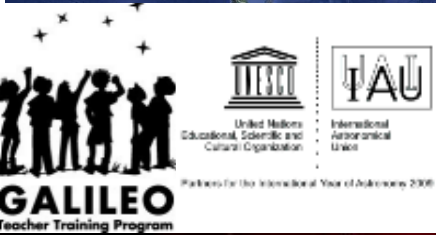
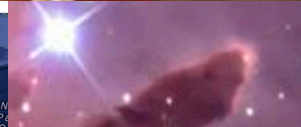
The background of the slide is a reproduction of the painting 'The Starry Night' by Vincent van Gogh. It depicts a turbulent night sky filled with bright, glowing stars and a large, luminous crescent moon. Below the sky, a dark, swirling sea reflects the celestial light. In the foreground, a small, dark boat with a single figure is visible on the water. The overall mood is one of awe and contemplation, which complements the philosophical questions posed in the text.

How can we solve the so many
complicated problems in our little
and fragile blue planet? With
nearly 7 billion unique beings?

Where is the answer?



Efforts that believe in the professionalism of Teachers



Equal opportunities to all!!!



100 Countries → 30 000 teachers



GALILEO
Teacher Training Program

United Nations
Educational, Scientific and
Cultural Organization

IAU
International
Astronomical
Union

Partners for the International Year of Astronomy 2009



THE UNIVERSE
YOUNG TO DISCOVER

BEYOND
ASTRONOMY



Equal opportunities to all!!!



100 Countries → 30 000 teachers



GALILEO
Teacher Training Program

United Nations
Educational, Scientific and
Cultural Organization

IAU
International
Astronomical
Union

Partners for the International Year of Astronomy 2009



THE UNIVERSE
YOURS TO DISCOVER

BEYOND
ASTRONOMY



We promote efforts that foster collaboration!!!



ERATOSTHENES EXPERIMENT

ERATOSTHENES' MEASUREMENT OF THE EARTH'S CIRCUMFERENCE

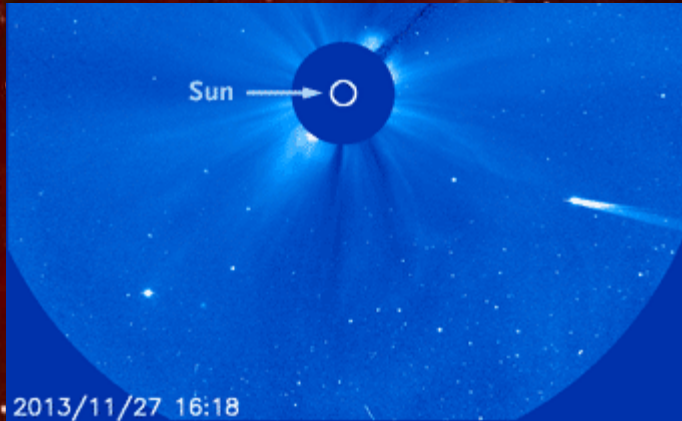
ORIENTING & ASKING QUESTIONS	HYPOTHESIS GENERATION & DESIGN	PLANNING & INVESTIGATION	ANALYSIS & INTERPRETATION	CONCLUSION & EVALUATION	CLASS ASSESSMENT
------------------------------	--------------------------------	--------------------------	---------------------------	-------------------------	------------------

Let's see how Eratosthenes did it!

How simple ideas lead to scientific discoveries.

https://www.ted.com/talks/how_simple_ideas_lead_to_scientific_discoveries

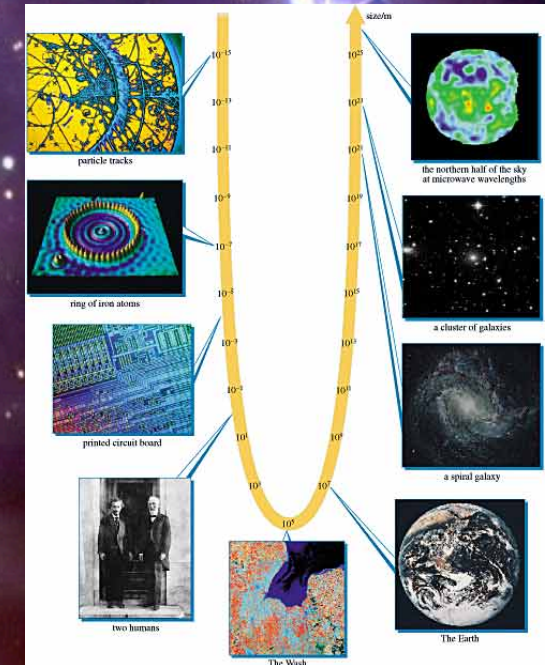
Efforts that believe in the future of mankind and prepare future generations



Hands on Comets



F1 in schools



Big Ideas of Science



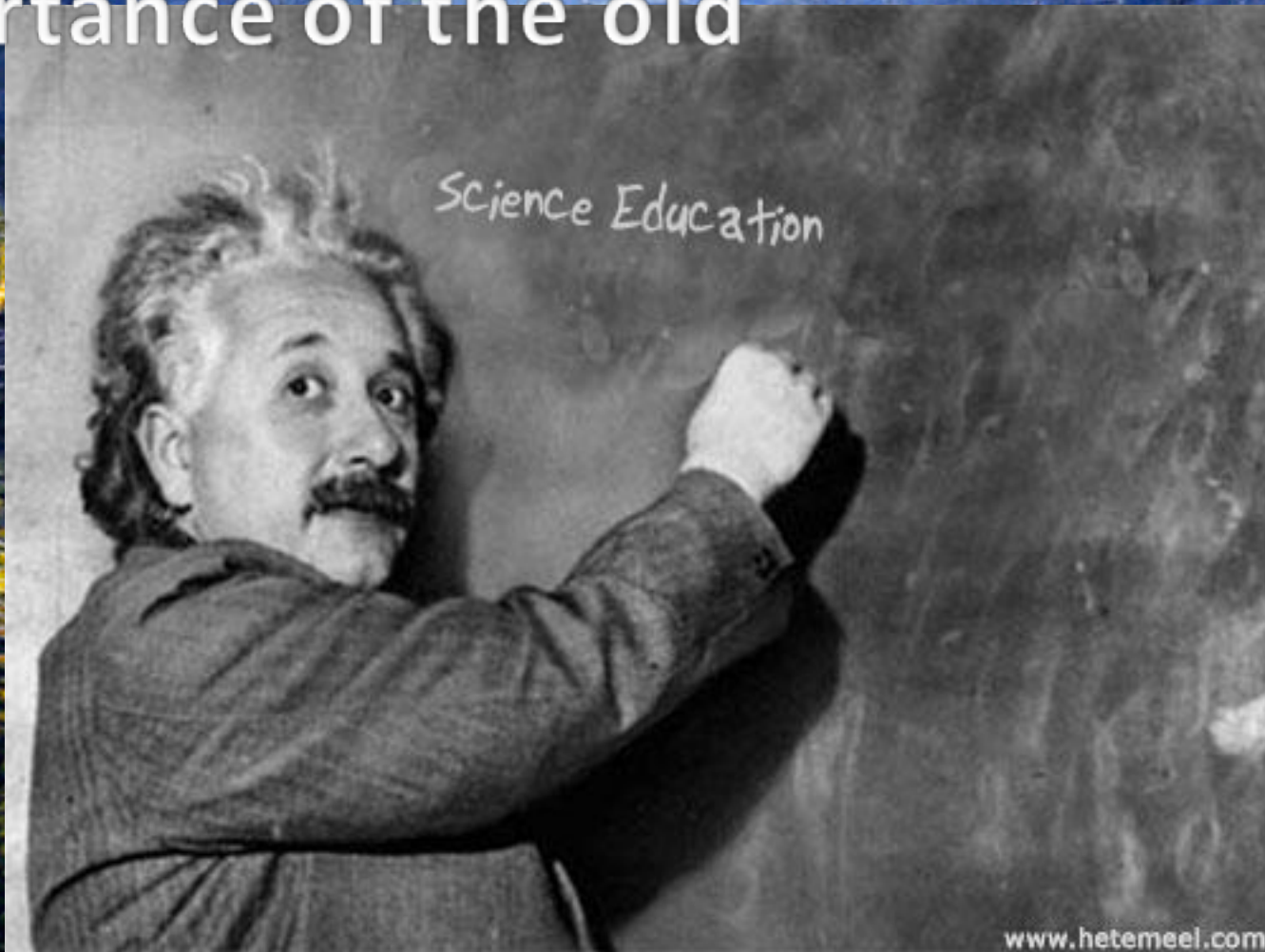
Observing with Robotic Telescopes



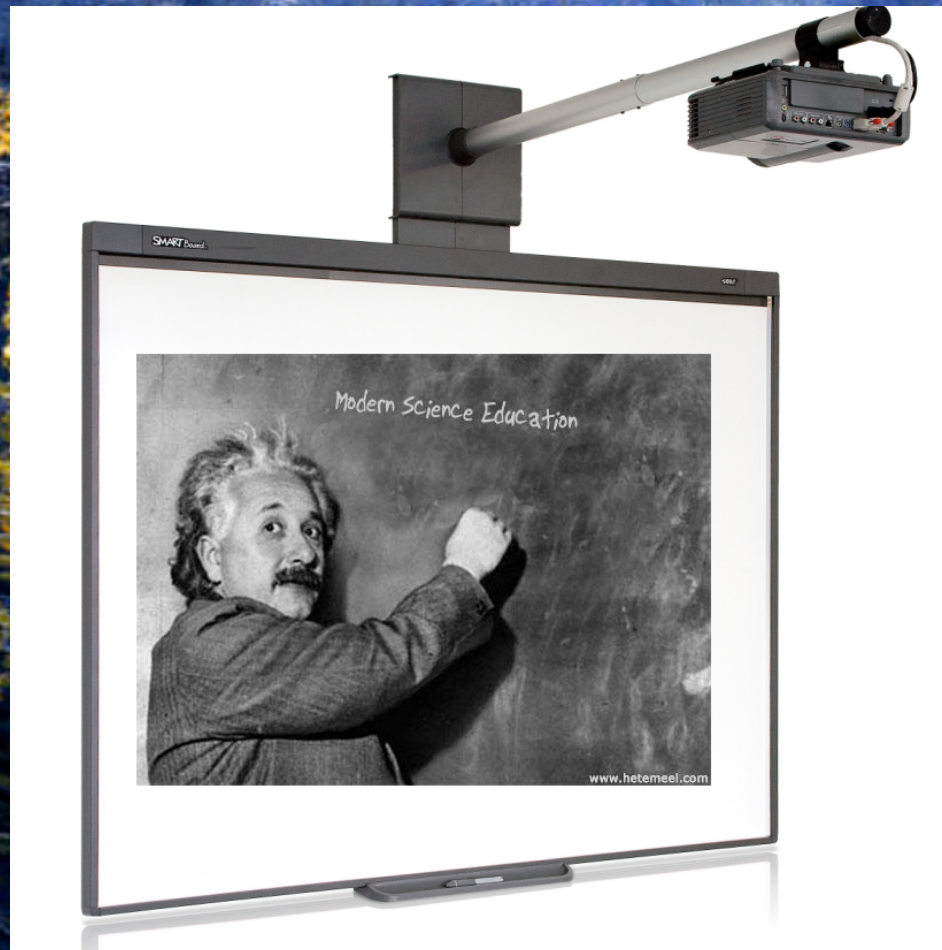
- Efforts that support teacher's journeys to innovation !!!



Efforts that respect and recognize the importance of the old

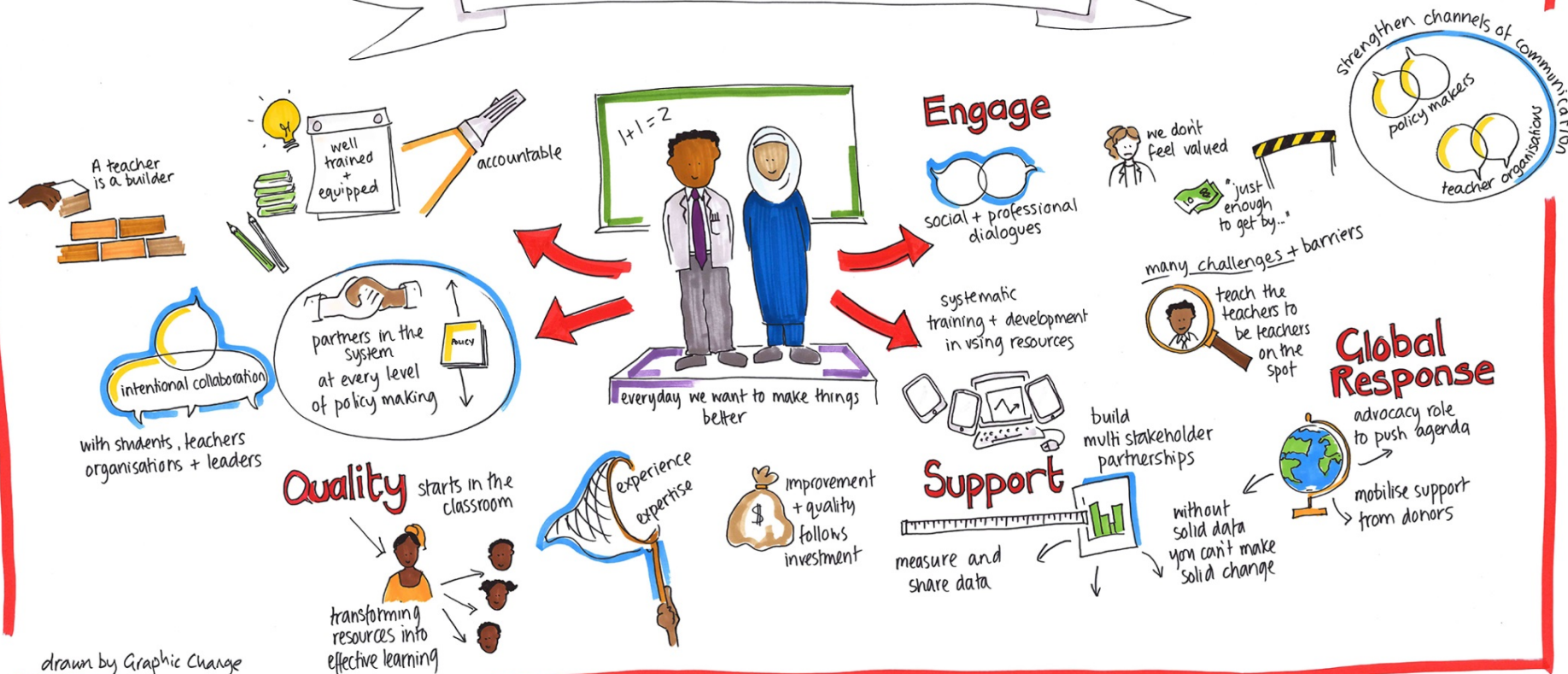


But reinvents the new, bring it to the
cutting edge of knowledge



Efforts that support teachers no matter where or when they are or what are the challenges they have to face

Empowering Teachers



build bridges and fill gaps

NASA NEGA QUE A "LUA DE SANGUE" SEJA PRESSÁGIO DO FIM DO MUNDO

CIÊNCIA & SAÚDE • ASTRONOMIA, ESPAÇO, NASA

Depois dos fortes rumores que fazem da "lua de sangue" um sinal de que o fim do mundo está próximo,...



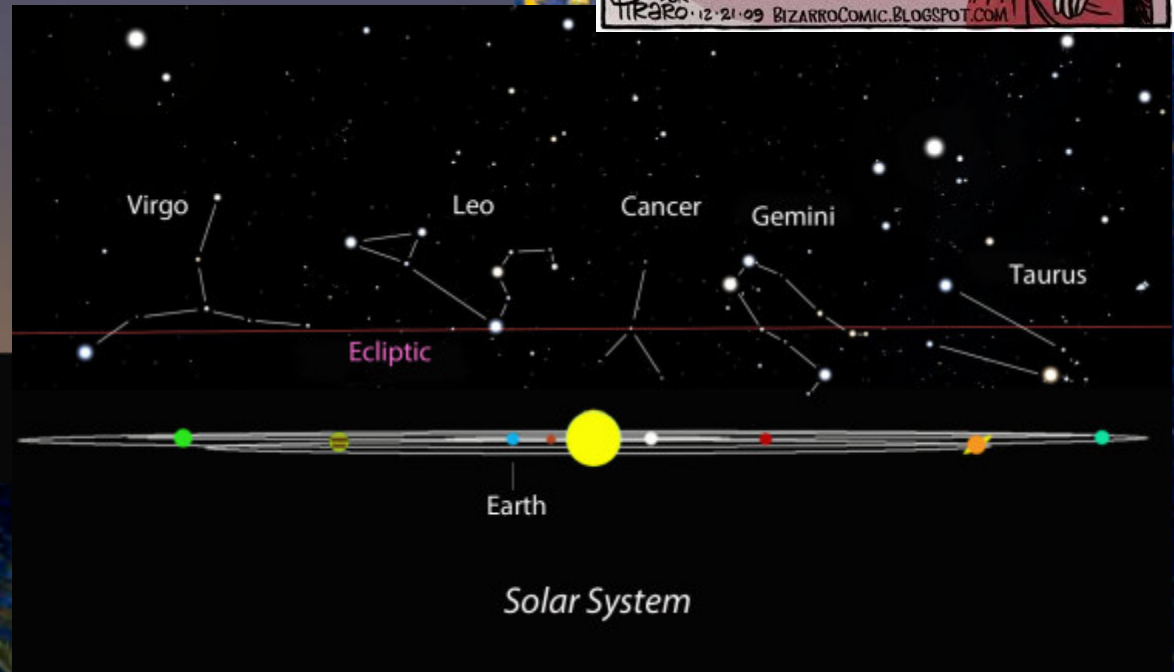
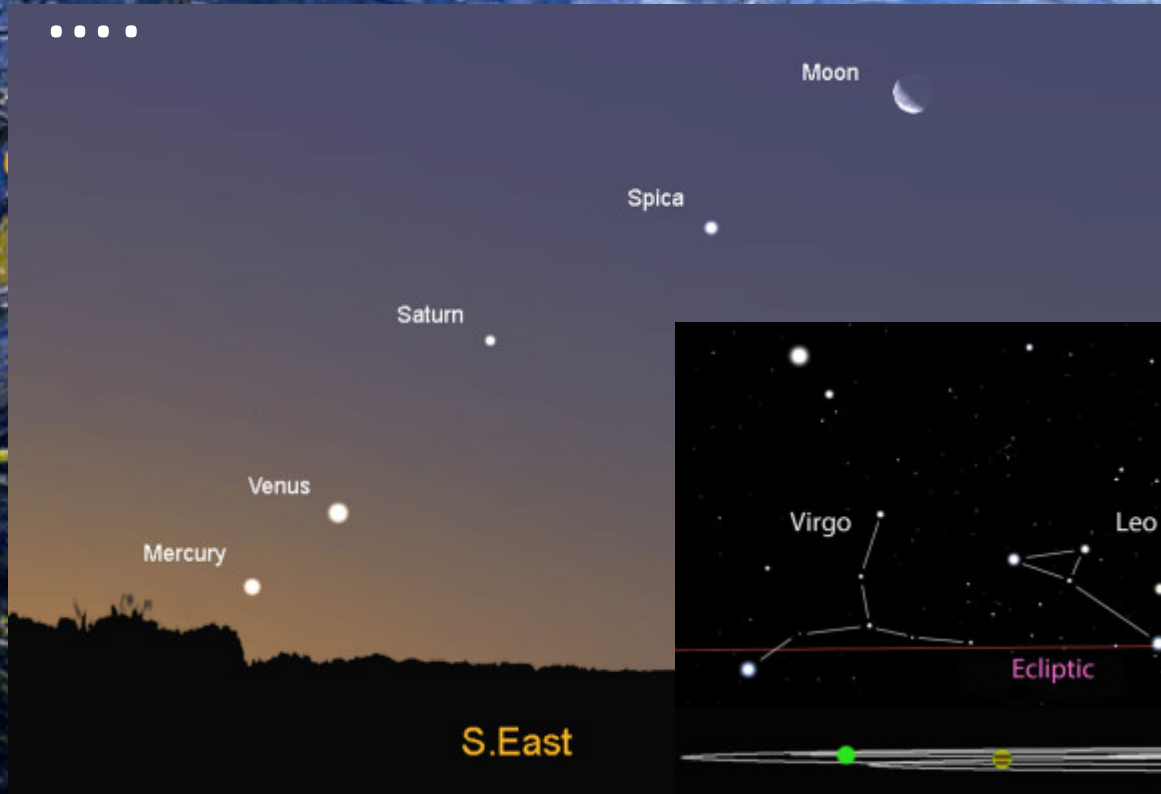
13 - Outras pessoas exercendo profissões liberais, técnicos e assimilados:

- 1310 Administradores de bens;
- 1311 Ajudantes familiares;
- 1312 Amas;
- 1313 Analistas de sistemas;
- 1314 Arqueólogos;
- 1315 Assistentes sociais;
- 1316 Astrólogos;
- 1317 Parapsicólogos;
- 1318 Biólogos;
- 1319 Comissionistas;
- 1320 Consultores;
- 1321 Dactilógrafos;
- 1322 Decoradores;
- 1323 Desportistas;
- 1324 Engomadores;
- 1325 Esteticistas, manicuras e pedicuras;
- 1326 Guias-intérpretes;
- 1327 Jornalistas e repórteres;
- 1328 Louvados;
- 1329 Massagistas;
- 1330 Mediadores imobiliários;
- 1331 Peritos-avaliadores;
- 1332 Programadores informáticos;
- 1333 Publicitários;
- 1334 Tradutores;
- 1335 Farmacêuticos.
- 1336 Designers.

Distinction for
services to
governments
to Astrologers
!!!!!!

Avoiding the danger of lack of scientific literacy

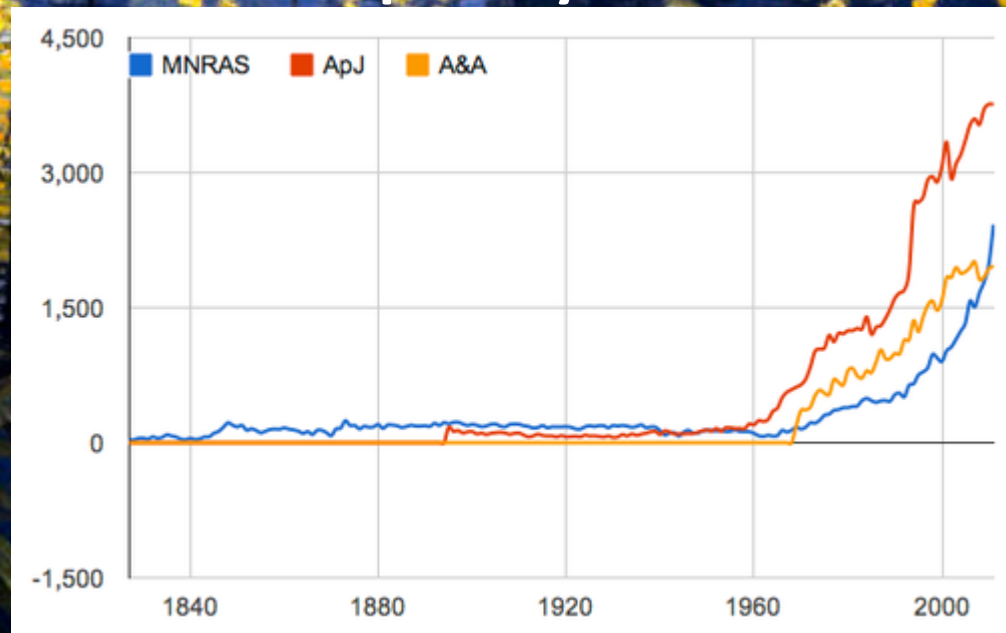
....



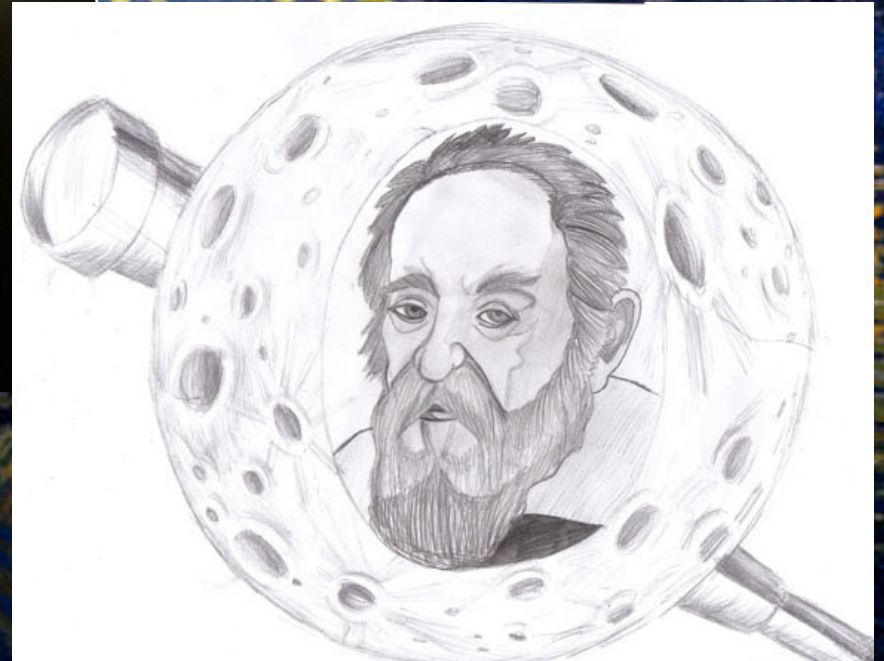
Providing access to one stop shop for information !!

- Astronomy, Particle Physics, Quantum Mechanics, General Relativity
- 1.8 million science articles per year

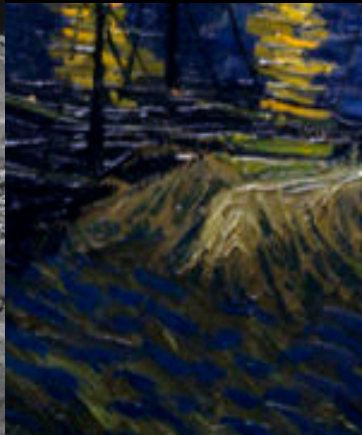
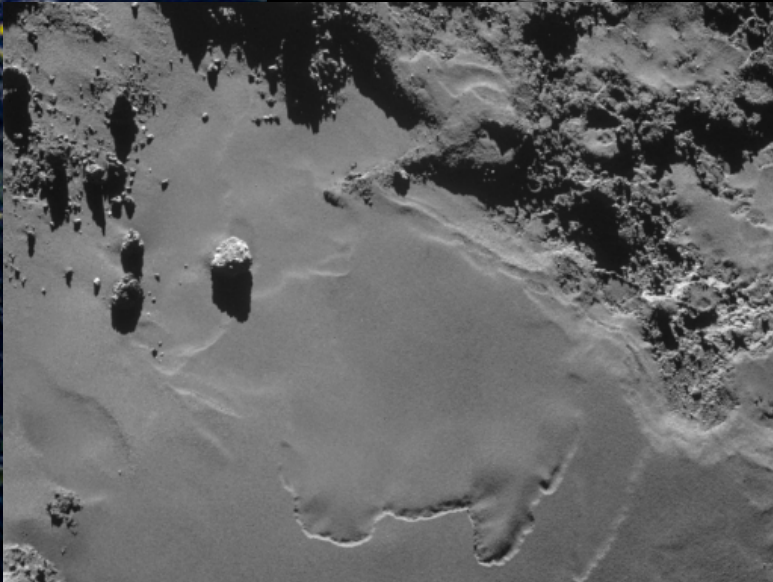
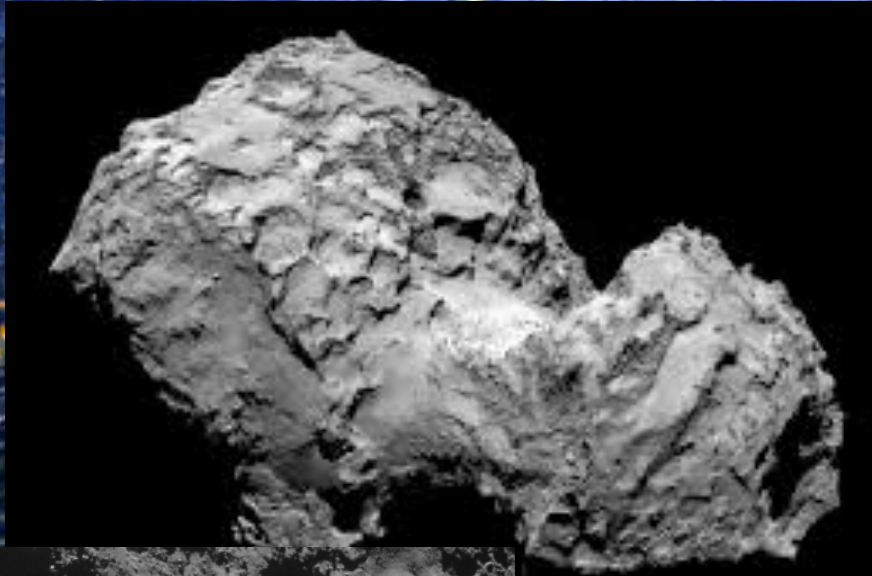
!!!!!!



We help teachers share fascination with the old



To bring to the school the thrill of the new
and unexplored...



Help Students Explore and Have a Sense of Wonder



Using Science as the perfect stage

- Science is Universal - One language
- Collaboration
- Sharing
- Supporting
- Foster key skills
- Empower free thinkers



Support for the creation of new
learning scenarios using best
practice tools and resources

INSPIRING SCIENCE hangouts

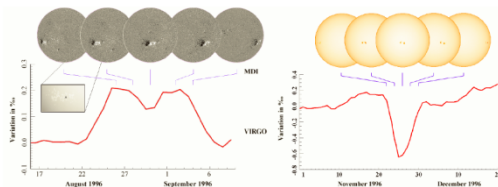


Experiment / Observation– Teaching Phase 4:

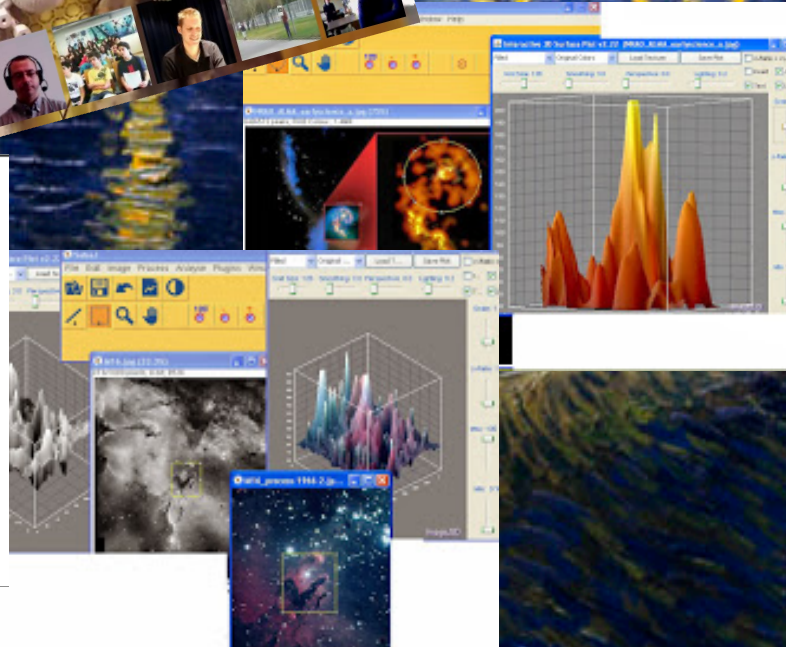
Discussion – EXPLANATION BASED ON EVIDENCE

The competing effect of plagues and sunspots for solar irradiance

These figures summarize the preceding discussion by illustrating the competing effect of plagues (tending to increase the irradiance, on the left) and sunspots (tending to decrease it, on the right).



[Source: Max-Planck Institut für Sonnensystemforschung
www.mps.mpg.de]



Discussing the big ideas and engaging minds with hands-on/minds-on



Two student masterclasses on the use of H.Y.P.A.T.I.A online lab took place in Greece

Wednesday, 1. April 2015 Past Events



The excitement of science directly in classroom with virtual tours to some of the most important science laboratories





Teacher / Educators Training

No matter
where in the
world you are



29/06/2007



Inspiring Students - In a platform near you

!!

iSe RESOURCE OF THE WEEK:

**Gravitational
Waves**

Quick reaction to
important news

iSe RESOURCE OF THE WEEK:

**Multiwavelength
Universe**

Sharing great
resources

iSe RESOURCE OF THE WEEK:

**Astronomy Bingo
with
Robotic Telescopes**

Creating
Opportunities

iSe RESOURCE OF THE WEEK:

ERATOSTHENES EXPERIMENT

(high school)

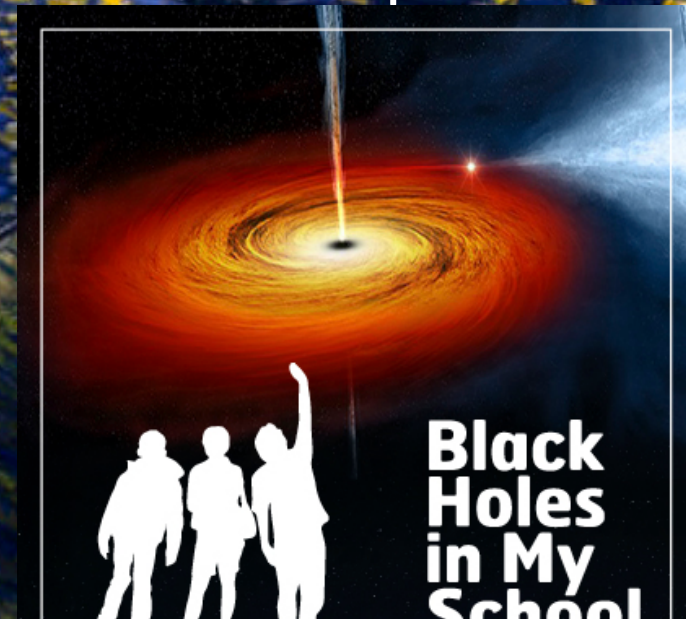
Alexandria

Syene

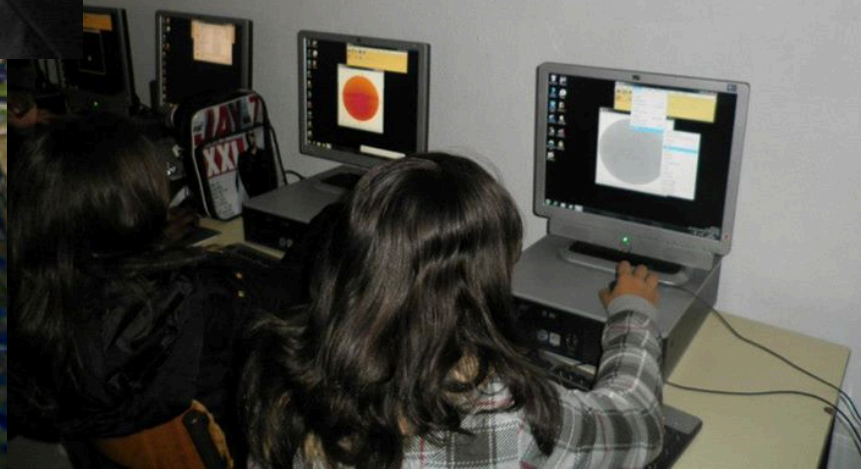
23.5°

0°

Handling data and
contributing to real
research experiences



Little Scientists



+351 21 453 7440

info@esea.ea.gr

inspiring SCIENCE

European science education academy

HOME

ABOUT US

ACTIVITIES

NEWS

GET IN TOUCH

F.A.Q



Everything is simple and easy, all in one



INTERNATIONAL
COURSES



HANGOUTS



NATIONAL
COURSES



TOOLS

Scratch

Coding Robotics Innovation

International Opportunities



**ESA - GTTP SPACE
AWARENESS WORKSHOP**



**SCIENCE THROUGH
SPACE & TIME**



**INSPIRING SCIENCE
EDUCATION ACADEMY 2016**

COSPAR 2016 Workshop



Apply to teacher training workshop at COSPAR 2016
in Istanbul, Turkey from 30 July - 7 August 2016.

[Read more →](#)



BEYOND EARTH ORBIT



**ASTRONOMY ADVENTURES
IN CANARY ISLANDS**

**Global Hands-On Universe (GHO�) Conference 2016 with Galileo Teacher Training Program
(GTTP) International Workshop 2016**

22-27 August 2016, Stord/Haugesund University College, Stord, Norway

The collage consists of 18 individual photographs arranged in a grid-like fashion. The central image is a large, high-resolution image of the Earth from space, showing the Americas. Surrounding this central image are smaller photos depicting various activities: students in a computer lab, a man holding a string of colorful beads, a group of students in a classroom, a large group photo of participants, a man pointing at a presentation screen, a group of students holding certificates, a man holding a string of beads, a group of students in a classroom, a large group photo of participants, a man pointing at a presentation screen, a group of students holding certificates, a man holding a string of beads, a group of students in a classroom, a large group photo of participants, a man pointing at a presentation screen, a group of students holding certificates, and a man holding a string of beads.



Welcome to the

inSpiring SCIENCE
education

SUMMER SCHOOL 2016

Facebook Page: www.facebook.com/esea.eu

Facebook Group: European Science Education
Academy (ESEA)

Twitter: @esea_eu

#ISE2016