

# 4th Shaw-IAU Workshop on Astronomy for Education

November 15-17, 2022



UAI  
IAU

***Astronomy:***

***towards a didactic focused on interdisciplinarity***

# NUCLIO

NÚCLEO INTERATIVO DE ASTRONOMIA  
E INOVAÇÃO EM EDUCAÇÃO

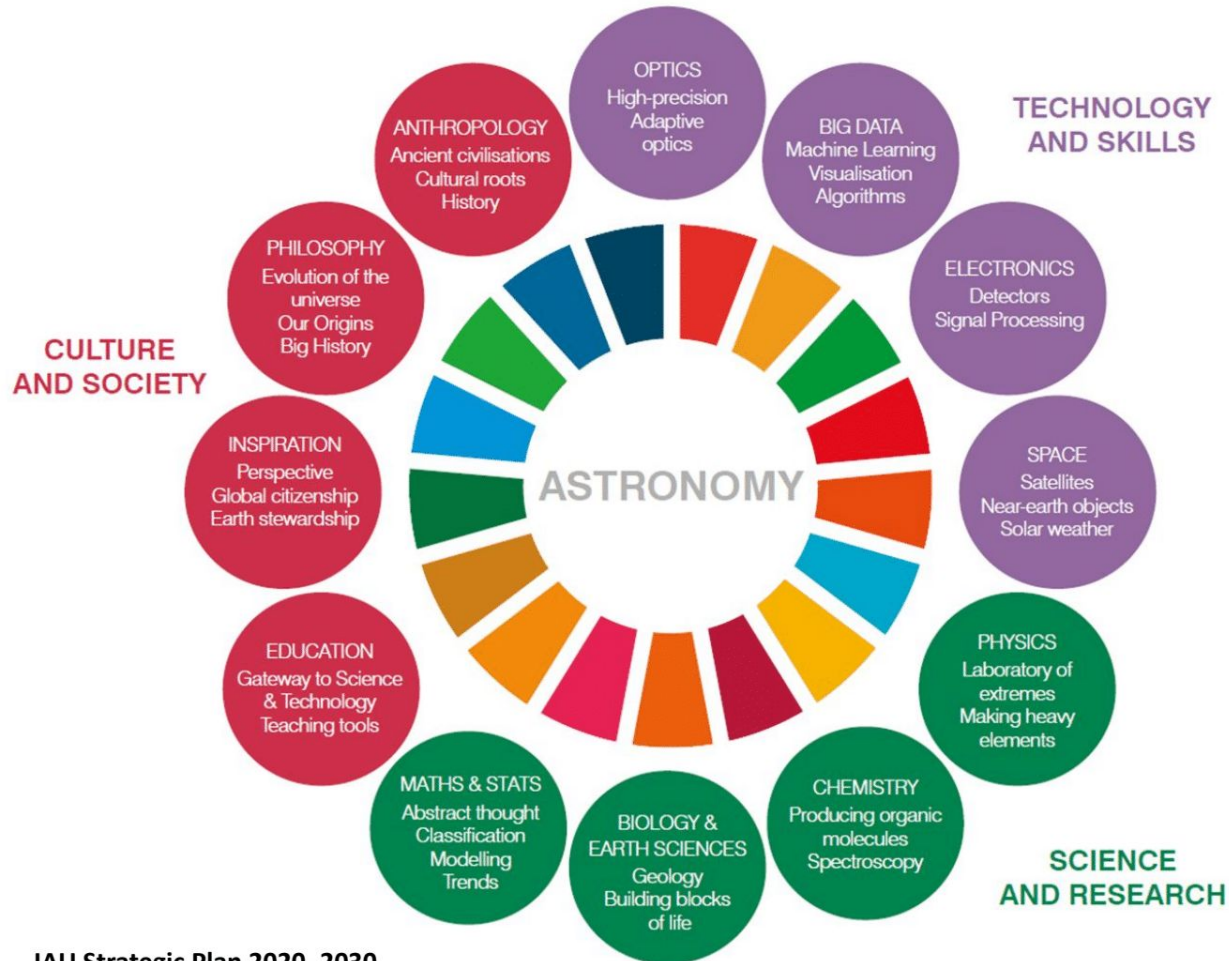


FACULDADE DE  
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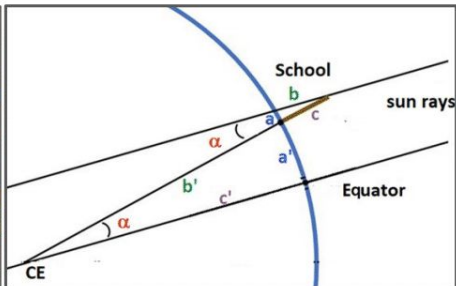


- Astronomy is **present** in our lives from the day we were born.
- Astronomy allows us to **explore** and understand the world around us.
- Astronomy combines **top science**, cutting-edge **technology**.
- Astronomy **inspiring** and exciting all ages.
- Astronomy is perhaps the area of knowledge that provides greater **interdisciplinarity**. With interdisciplinarity, **the whole is greater than the sum of the parts**.

**We need it in school**

# Reshaping the School

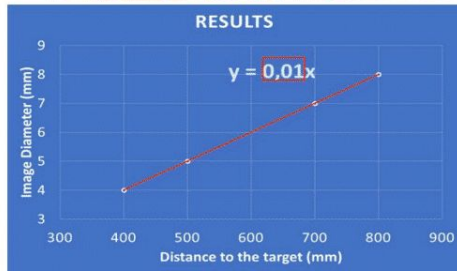
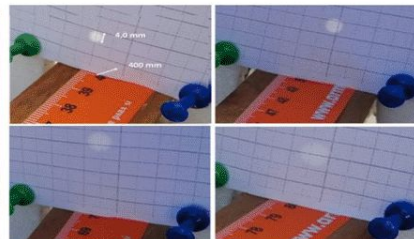
## Erathostenes Experiment



target with graph paper

pinhole

From a pinhole to the size of the sun



## different approaches to Science using Astronomy



School must tend to be a  
Open to promote :

Why...When...

How to....

What if...



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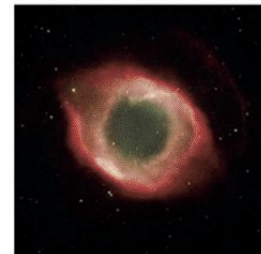
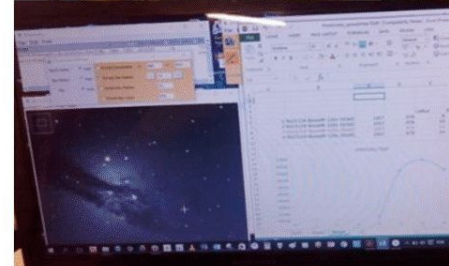
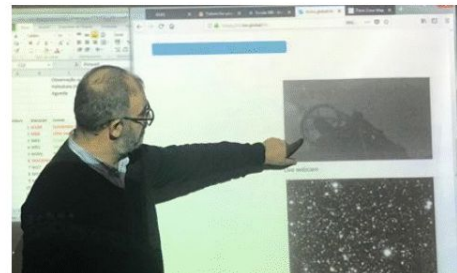
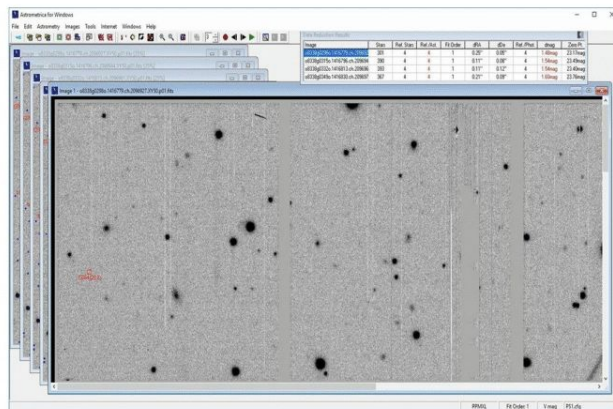


# Learning Science Doing Science



Technology has opened new possibilities offering new experiences for scientific and interdisciplinary projects capable of promoting consolidation of knowledge and the acquisition of scientific competences.

**LaSciL project** provide innovative ways to involve teachers and students in eScience by sharing and exploiting the collective power of high quality digital resources, research facilities and scientific instruments.



**NUCLIO IASC:** Since 2007 in Portugal, with more than 300 schools in more than 50 campaigns. Thousands of preliminary discoveries and ~80 provisional discoveries already counted, and 2 named by students from Portuguese schools - Lusitano (2012 FF25) and Fado (2017 BF79)

# For a better world

- Astronomy Education more than information. Astronomy is about **wonder, hope, humility, optimism, sense of belonging, and vision of the whole.**
- It is a territory that allows educators to inspire **to be curious, observers,** to **relate** different fields of knowledge at different levels of depth.
- helps to **create a vision** of a world **without political, ideological or cultural barriers. Without discrimination**
- Create the sense of **belong to the planet** instead of **the planet belonging to us.**
- Create true **cosmopolitans** from this [small pale blue dot](#) suspended in the Universe.

**This is why we need Astronomy at School.**



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