

Summer School 2022



The structures of the Universe

How do the structures of the Universe contribute to its sustainability?

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How do the structures of the Universe contribute to its sustainability?

Cognitive Objectives Develop:

1. literacy scientific about Astronomy; 2. reasoning and the ability to solve problems; 3. communication, for share the results.

Affective Objectives: Stimulate autonomy and personal and team development; Contribute to the student's ability to develop interpersonal relationships.

Psychomotor Objectives: Awareness and mastery of the body

Title: The structures of the Universe

Short description: An awareness about the Astronomy in scientific,

technological and social meaning of human intervention.

Keywords: Astronomy; Telescopes; STEAM Learning; Creating open educational

material.

Students: 12-15 years old: Middle school

Prerequisites: No expertise needed in Space Situation, just exercise a

participatory citizenship.

Explore *Stellarium* software and *Salsa J* software and Portal LCO

Describe the organization of celestial bodies by locating the Earth in the Universe

Observe the stars with different telescopes

Interpreting information about: The light waves and their spread; The light reflection.

Interpreting information about Space Weather (SWE)

STEAM Learning:

The student organizes his work by setting goals

<u>Preliminary Explanations</u> <u>Plan Investigation</u>

The student is aware of the procedures used and their difficulties

<u>Perform Investigation</u> <u>Analysis and interpretation</u>

The student takes note of his productions for the task

<u>Conclude and communicate</u>

<u>result/explanation</u>

<u>Evaluation/Reflection</u>

Consider other explanations