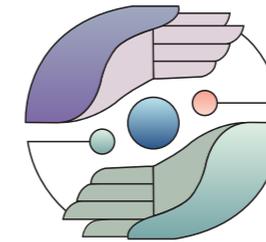


Contact AristarchusTeam

e-mail: aristarchus@ml.u-cergy.fr



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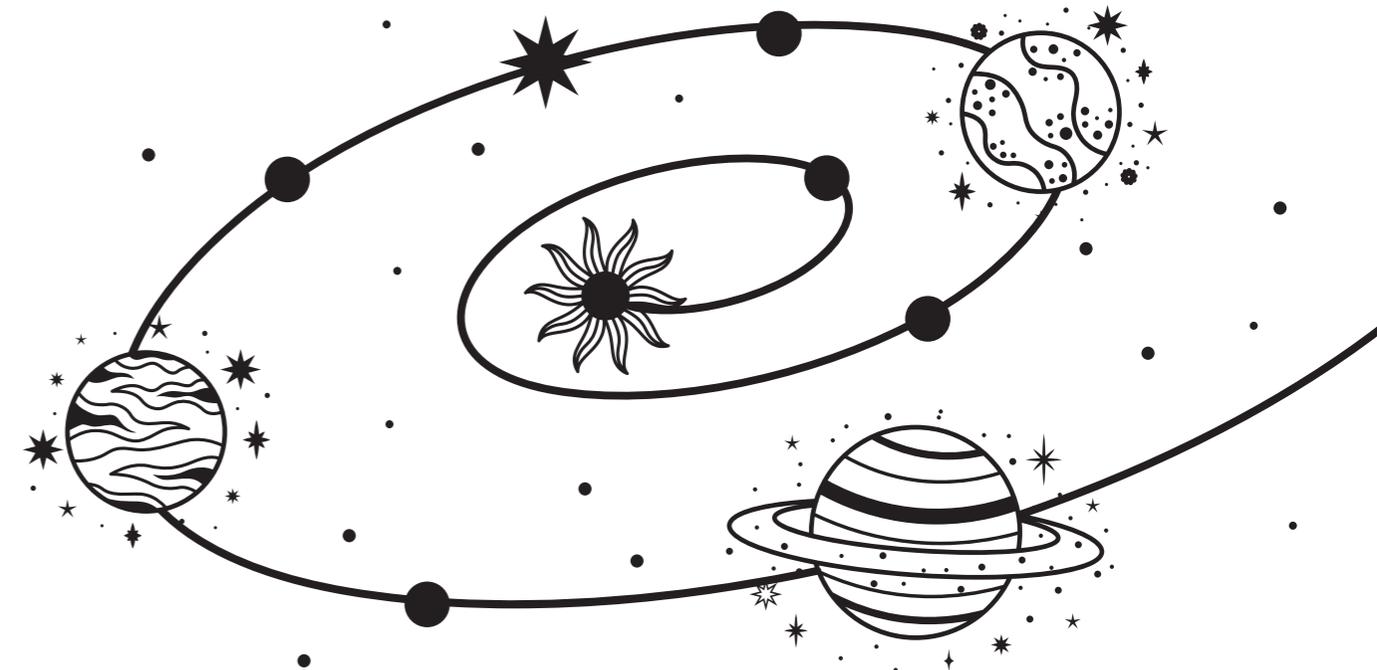
Artistic Reality In School educaTion: enActed, Reflective and Collaborative learning with the HUman orrery Space



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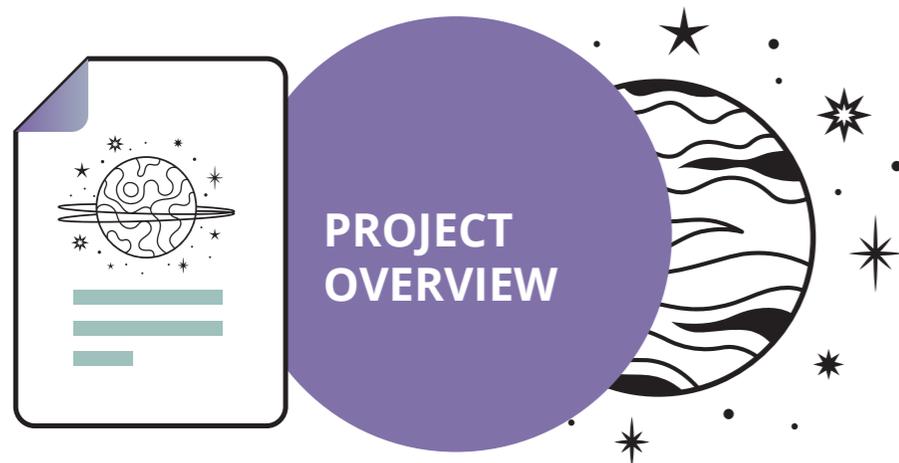


Aristarchus Project



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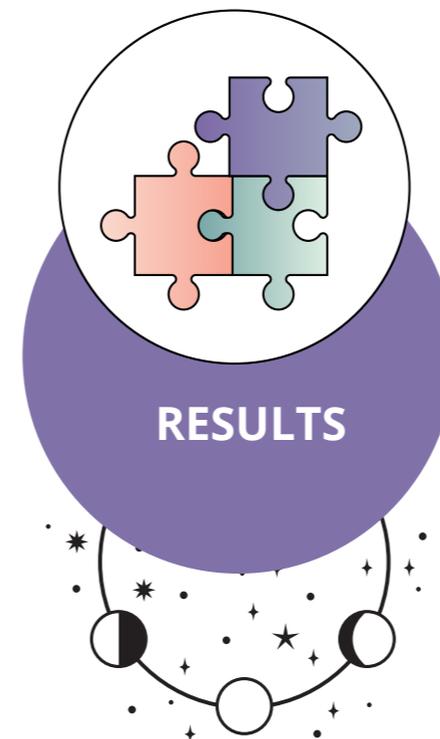
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Space exploration by humans has opened up new horizons for more than half of a decade increasing the knowledge of the cosmos. Such an achievement has sparked youth's interest and continues to inspire them in science, and particularly in the solar system phenomena.

Astronomy studies the universe beyond Earth's atmosphere providing a highly motivating context for learners to develop observational and scientific skills while exploring fundamental laws of mathematics and physics.

As teaching astronomy in formal education is considered a challenge, a holistic framework aspires to build the capacity of educators in implementing meaningful STEAM projects.



Methodological Framework for the Pilots and Guidelines for the Teachers



It will set the methodological framework for the pilot implementations in schools including extensive guidelines for the teachers and the process for assessing the effectiveness.

Educational Toolkit



It will be a complete and coherent toolkit with ready-to-use material and best practices on how to use the Human Orrery under the umbrella of STEAM in the classroom.

Augmented Reality Application



It will be a gamified Augmented Reality (AR) application suitable for free use on learners' smartphones that will improve motivation and conceptual understanding of simple relations in the solar system and physics in general.

E-Learning Platform and gamified learning modules



It will host gamified games enabling learners to apply their knowledge and experience acquired related to the Human Orrery and other physics concepts as well as support teachers in designing new learning experiences.



Aim

The ARISTARCHUS project aims at building on the Human Orrery, a 3D kinesthetic model of planetary motion in the inner solar system, to engage learners in interdisciplinary and inclusive STEAM activities.

Objectives

- Exploration of fundamental laws of physics and concepts of mathematics in both an attractive and meaningful way.
- Development of learners' direct and augmented experience scientific knowledge in STEAM needed to engage in the modern scientific world.
- Improvement of both the learning in an interdisciplinary STEAM context, and the well-being and social-being of the learners.
- Enhancement of the scientific process skills of learners.