

Exploration of Europa

Éric Lavigne, Collège André-Grasset

This activity, which is part of the astrophysics module, requires two hours of class time per week for a total of 15 weeks. It is designed for a group of approximately 36 students in the second year of the DEC Plus option of the Natural Science program at Collège André-Grasset.

In teams of three to five, the students develop a project to explore the solar system. Each team oversees a particular aspect of the project and must communicate with the other teams in order to provide and obtain the information needed for the mission.

The students are divided into nine teams, each responsible for a particular aspect of the mission:

- management
- launch
- trajectory
- energy
- characteristics of the celestial body and landing
- communication with the Earth
- imagery
- science I
- science II

The students must find a solution to their aspect of the problem. They must be creative and use the knowledge acquired in their science courses.