

## Collaboration ProAm – GAIAMOONS Project

The GAIAMOONS project is a collaboration between l'Observatoire de la Côte d'Azur, IMCCE laboratory at Paris Observatory and the University of Poznan in Poland.

The aim of the project is to reveal a population of binary asteroids, by exploiting the very precise astrometry made possible by the GAIA satellite.

Researchers in this field are sorely lacking in real data due to the difficulty of observing them. Binaries can be detected by direct imagery for larger bodies or by photometry or radar for smaller one. The database currently available is biased. The GAIAMOONS projects aims to fill this gap by studying mid-sized binaries and completing existing data.

By using GAIA's precise astrometry, we are able to detect the tenuous oscillations that can be induced by the presence of a satellite around an asteroid. In this way, a list of potentially binary objects is established and observational campaigns are launched to confirm the binary nature of these systems using the stellar occultation observation method. The need for a dense ground network of observers is important, and it is in this context that collaboration with professional and amateur astronomers is envisaged. By publicizing the various events that can be seen throughout France and throughout the year, astronomers are invited to observe these occultations simultaneously in order to gather valuable scientific data.

In this presentation we will present the GAIAMOONS project, discuss the requirement technique to observe an occultation by these targets and present a selection of future occultations campaign in particular visible from France.