

Evolution of the protolunar disk

The goal of this project is to explore the formation of the Moon after the impact that split the proto-Earth. After the impact, a cloud of debris created a disk, which will be the topic of this study. For that, this project will start from a recent study by Charnoz and Michaut, in which the cooling of the disk and the evolution of volatile were simultaneously simulated.

The student will

- explore the litterature, to understand the different processes at play,
- understand the scenarios of formation of the Moon,
- implement numerical routines, which will be confronted to the results of the paper.



Supervisor : Dr. Benoît Noyelles, UTINAM, Besançon Observatory, benoit.noyelles@univ-fcomte.fr

Bibliography :

- Charnoz S. & Michaut C., 2015, Evolution of the protolunar disk : Dynamics, cooling timescale and implantation of volatiles onto the Earth, *Icarus*, 260, 440-463