

Thèse – S07

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The background is a vibrant space-themed illustration. It features a gradient of red, purple, and blue. There are several stylized planets: one with blue and white stripes in the top left, one with orange and white stripes in the top right, and a large one with yellow and red stripes and a red ring in the bottom right. Numerous small white stars and dots are scattered throughout the background.

01

Summary of objectives

Summary of objectives

- ARIEL school + summary of lessons + work completed (~2 weeks) - Completed
- Continue learning EOS and interior physics (~2 weeks) - Late
- Have global understanding of Exorem codes (~1 month) - Continuing (J-K curves)
- Have global understanding of Exoris codes (~1 month) - Not started
- Start to use Exorem + Exoris together (~1 month) - Not started
- Start to explore coding P.Tremblin's fingering convection (ATMOS) (~1 month >) - Not started

The background is a vibrant, abstract space-themed illustration. It features a gradient of colors from deep red and purple on the left to light blue on the right. Scattered throughout are various celestial bodies: a planet with blue and white stripes in the top left, a planet with orange and white stripes in the top right, a planet with yellow and red stripes and a red ring in the bottom right, and several smaller, dark blue and purple planets. Numerous small, white, four-pointed stars are scattered across the background, adding to the cosmic feel.

02

Ariel School summary

Ariel School summary

- Planetary atmospheres + Thermodynamics
 - Equilibrium/Disequilibrium/Photo Chemistry
- Atmosphere dynamics
 - Circulation cells, adiabatic and non adiabatic gradients
- Links between solar system and exoplanets
 - Escape models, Cloud microphysics, Radiative transfer
- Imaging - Hubble
- Intro to Bayesian statistics
- Tutorials
 - GCM, chemistry models, retrieval (Tauxex)
- Practice sessions
 - Building transmission spectrums
 - Retrieving planet with spectrums

The background is a vibrant, abstract representation of space. It features large, flowing, organic shapes in shades of red, pink, purple, and blue. Scattered throughout are small white stars and several stylized planets. In the top left, there's a planet with blue and white stripes and another with orange and white stripes. In the bottom right, a planet with yellow and red stripes is shown with a thin orange ring. Several small, dark blue, irregular shapes resembling asteroids or moons are also present.

03

Further work,
conclusion, discussion



Further work, conclusion, discussion

- Continue learning EOS and interior physics (~1 week)
- Have global understanding of Exorem codes (~2 weeks)
- Have global understanding of Exoris codes (~2 weeks) - (Friday meeting with S. Mazevet)
- Start to use Exorem + Exoris together (2 months)
- Start to explore coding P.Tremblin's fingering convection (ATMOS) (~1 month >)