

# **Astrophysical Objects**

**Course requirements**

**Helga Dénés 2023 S2 Yachay Tech**

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# Classes

- Monday 1:00 PM - 2:59 PM; I-201
- Thursday 5:00 PM - 6:59 PM; I-203
- Friday 5:00 PM - 6:59 PM; I-201

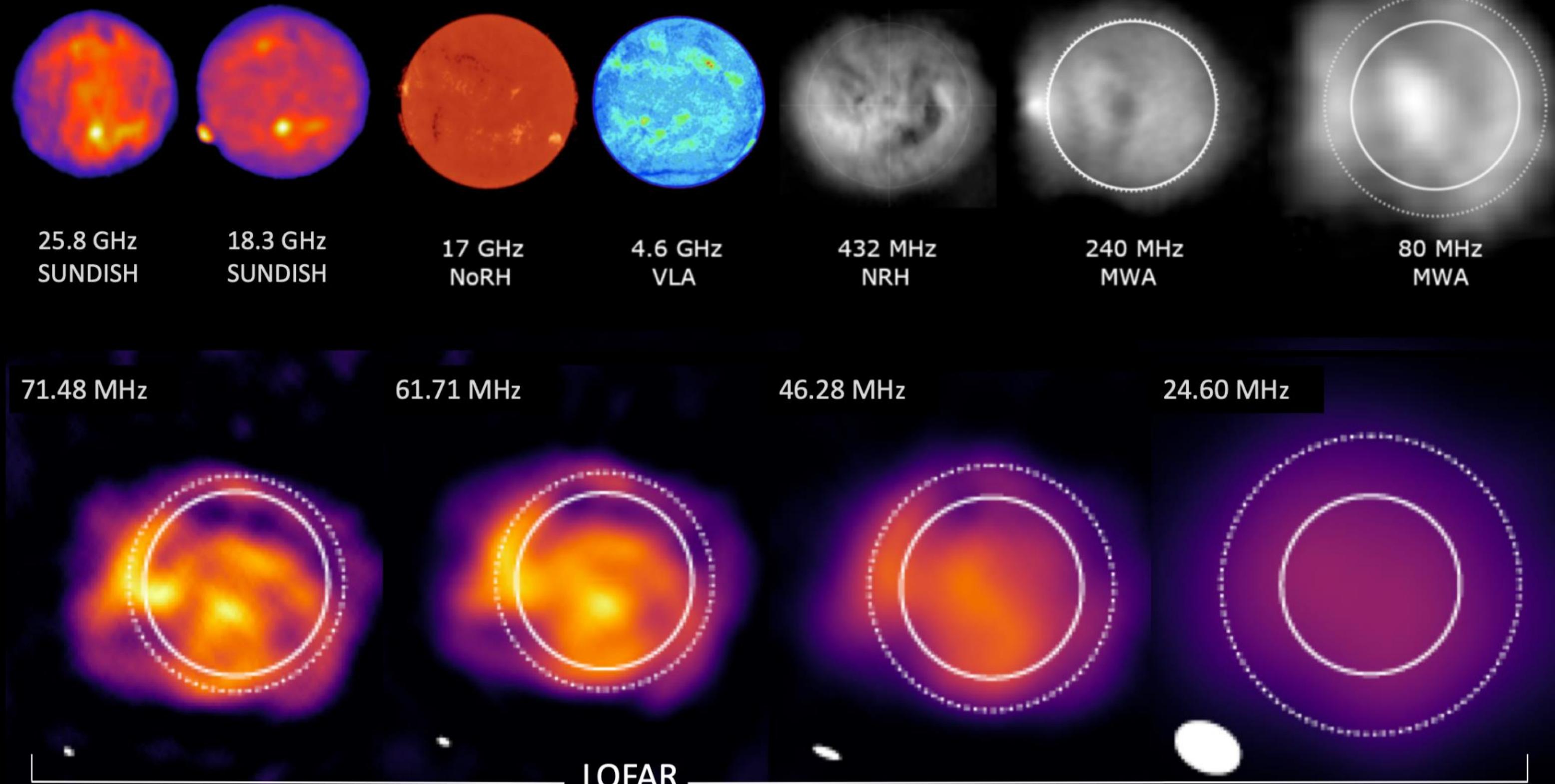
Can we shift the Friday class?

Attendance is not mandatory, but recommended.

If you decide that you do not want to take the class after all, make sure to unregister from the class. Otherwise the class will be failed.

# Syllabus

## Multi-wavelength



Radio

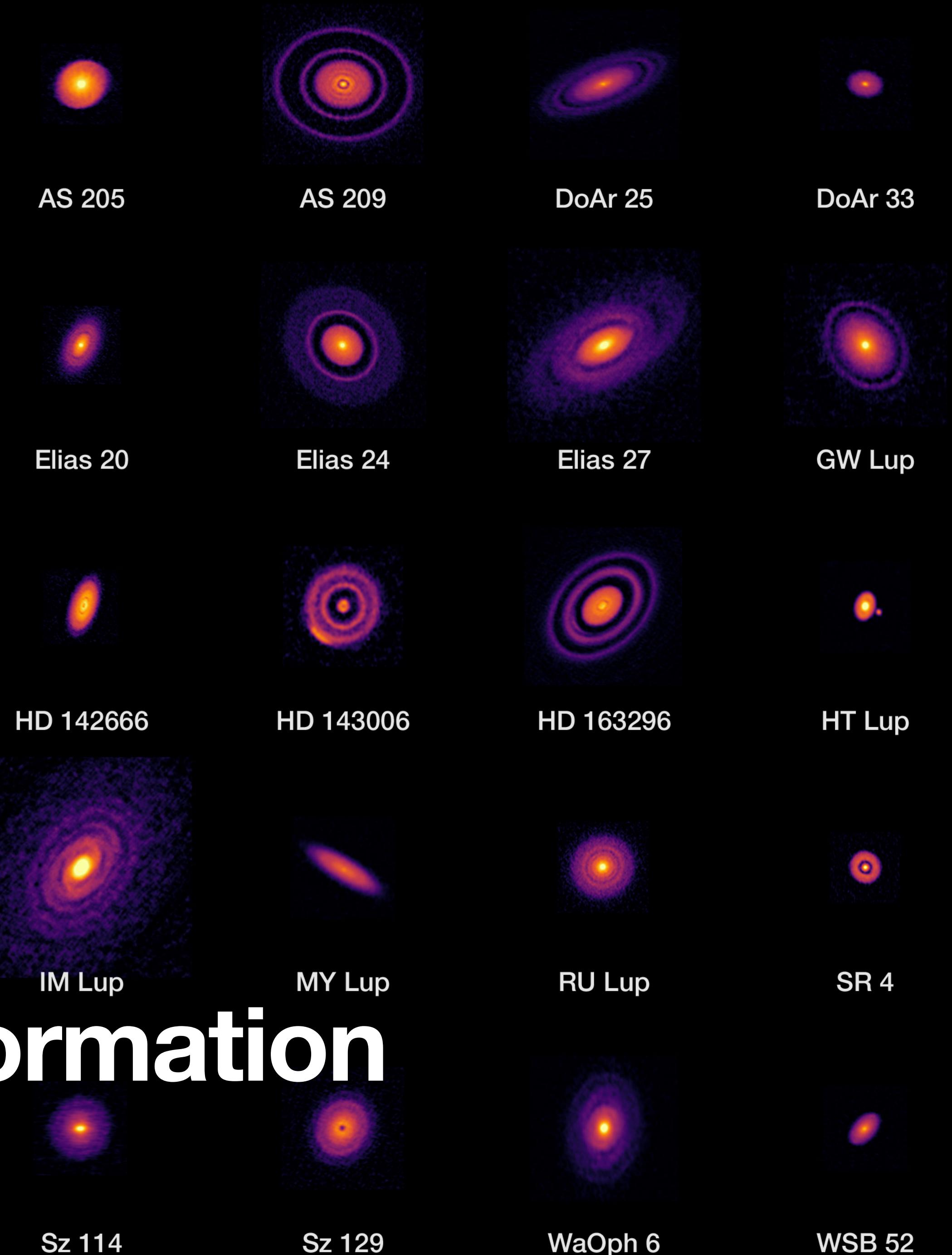
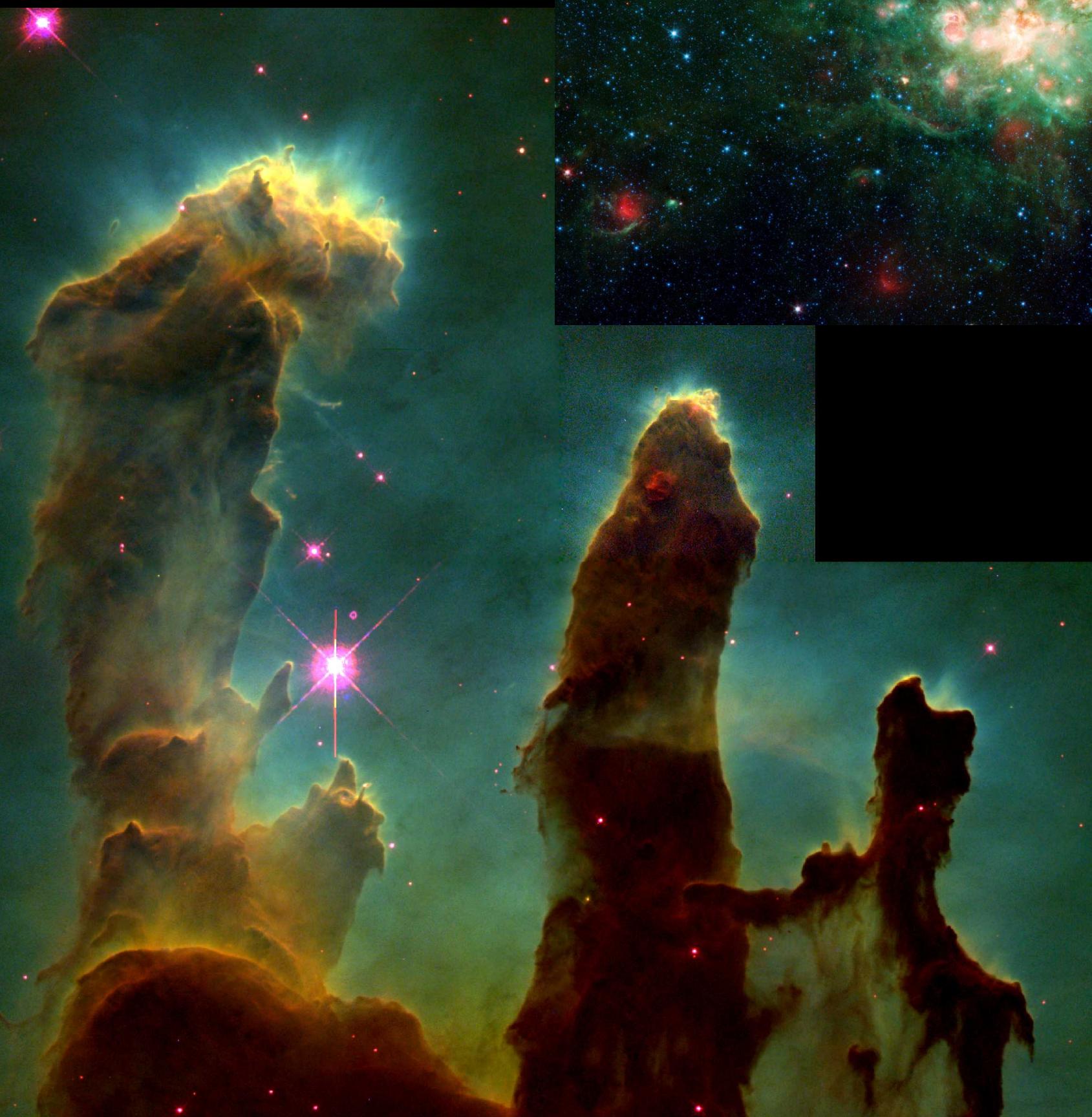
# Syllabus

# Interstellar medium



# Syllabus

## Star formation



## Planet formation

# Syllabus

## Black holes

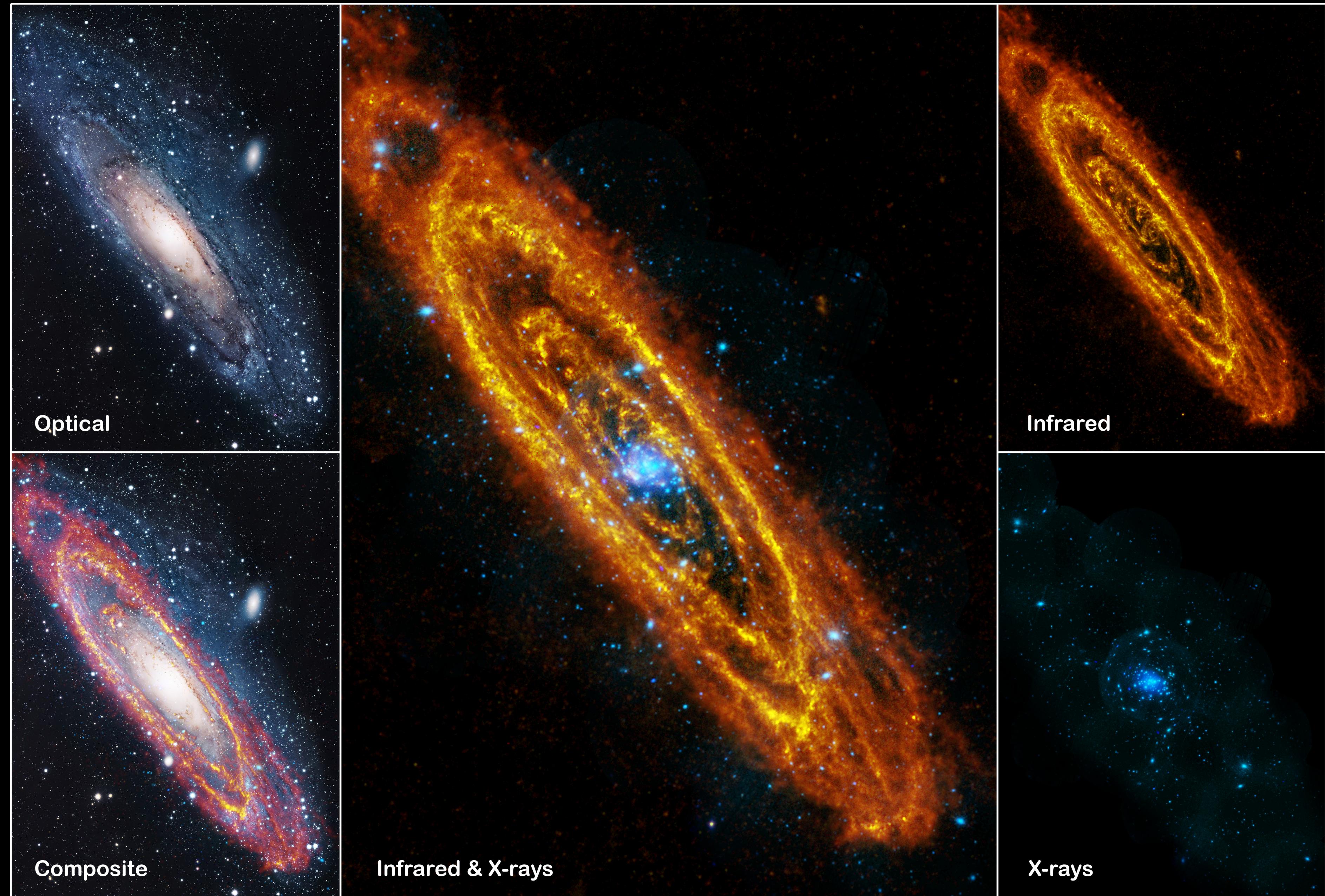


And related phenomena

50 kpc

# Syllabus

## Galaxies



# Syllabus

## Topics

- Multi-wavelength astrophysics
- Interstellar medium
- Star formation and planet formation
- Black holes and related phenomena
- Galaxies

# Evaluation

- Quizzes + Homework **40% of the grade**
- Midterm exam ~ **30% of the grade**
- Final exam ~ **30% of the grade**

Exams, Quizzes and Homework will be announced in advance in class and via email.

# Academic integrity

Academic integrity is very important.

**Cheating in exams will have a penalty of a score 0 for the full exam.**

Cheating in the quizzes or homework will have a penalty of a score 0 for the relevant part of the Quiz or homework.

**For the homework always cite sources of information.**

**ChatGPT is not a good source of information!**

# Recommended reading

I am going to use material from these books for the class:

- Carroll, Bradley W., and Dale A. Ostlie. **An Introduction to Modern Astrophysics.**
- NRAO: Essential Radio Astronomy (<https://science.nrao.edu/opportunities/courses/era>)
- Arnab Rai Choudhuri: **Astrophysics for physicists**
- Thomas L. Wilson , Kristen Rohlfs , Susanne Hüttemeister: **Tools of Radio Astronomy**

There are also many other good books on the topic and plenty of online resources.

Please feel free to contact me in person or through email if you have questions about the class.

# Resources

My email: [hdenes@yachaytech.edu.ec](mailto:hdenes@yachaytech.edu.ec)

I mostly use slides for this class, based on the this book. All the slides and tutorials are going to be available online from **GitHub**: [https://github.com/helgadenes/Astrophysical\\_Objects\\_yachay](https://github.com/helgadenes/Astrophysical_Objects_yachay)

# **Class representative?**