# The astrophysics of exoplanets

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# Code of conduct

We encourage questions and people saying they don’t understand something.

We treat everyone with respect, no matter what their race, gender identity, sexual orientation, age, religion, nationality, disabilities or other identity characteristics are.

# Pronouns

I use she/her pronouns.

I will use your pronouns, whatever you tell me they are.

# Format

“Lecture + seminar”:

45 min traditional lecture
45 min active learning with your participation

# Course materials

I make all slides and other electronic media (papers, simulations, data sets) available to you:

https://moodle2.uni-potsdam.de/course/view.php?id=26224

(or from the moodle main page, search for the tag “ExoAstro”).

I will also upload screenshots of things I write on the electronic white board, this will happen each Wednesday afternoon.
I strongly encourage you to take your own notes!

# Grading

For Master's degree in Astrophysics:

Need pass/fail grade.

Minimum to achieve "pass" grade:

In the final 2 months of this course, you will select a peer-reviewed publication on exoplanets, and you will provide a short essay on that paper where you connect the results from that paper with things you have learned in this course.

Plus active participation in hour 2 each week.

# Grading

For Master’s degree in Physics:

Need actual numeric grade.

You need to contact me so that I can define the graded task for you. It will likely take the form of leading the discussion of a scientific paper in the class, or similar.

Plus active participation in hour 2 is expected each week.

# Active learning and participation

Active learning: students try to solve things themselves / in small groups during (parts of) the lecture time, actively engage with the material.

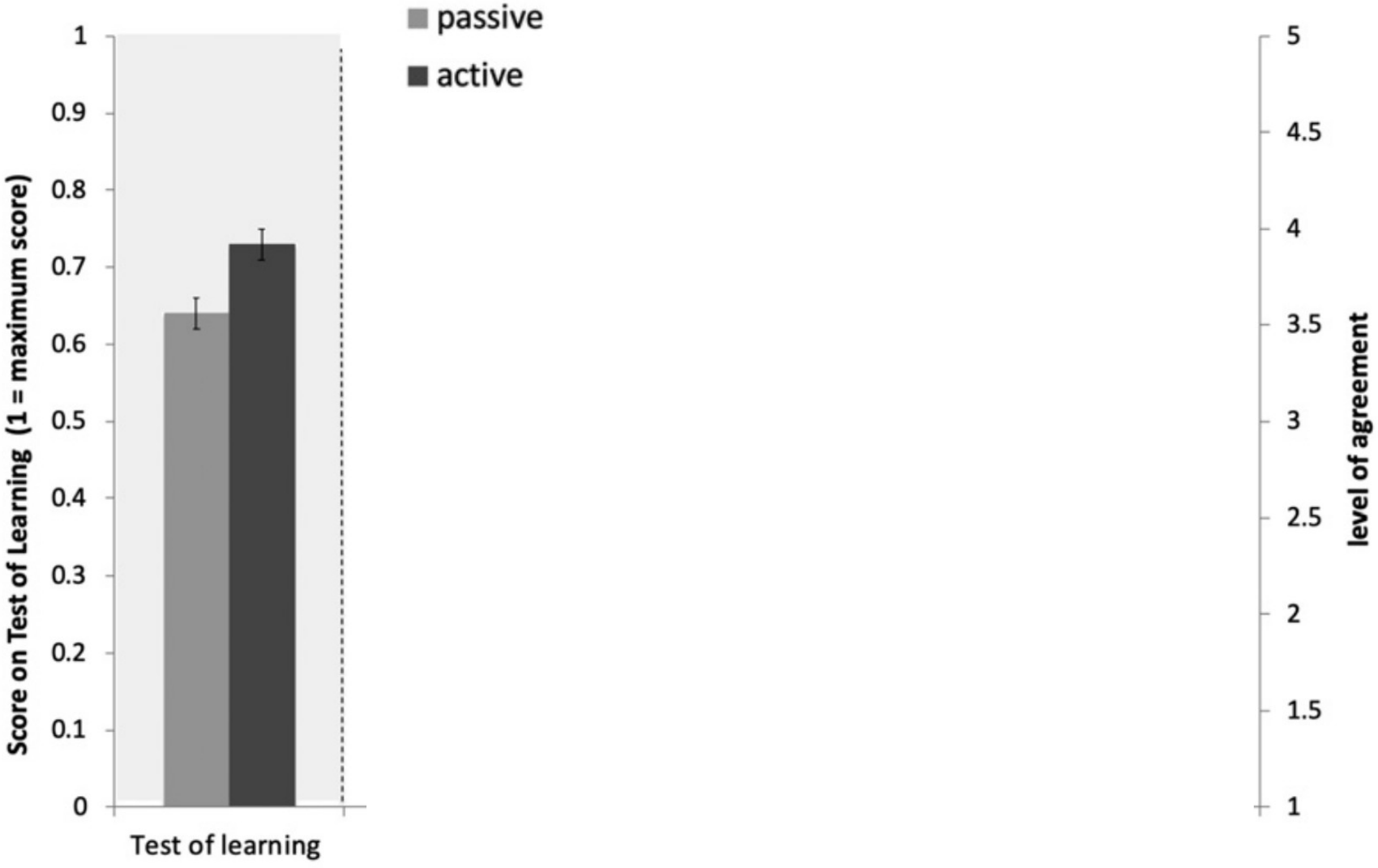
This is more difficult than usual this year, because this class is purely online due to the Covid-19 pandemic. We will still make it work!

# Active learning and participation

Active learning: students try to solve things themselves / in small groups during (parts of) the lecture time, actively engage with the material.

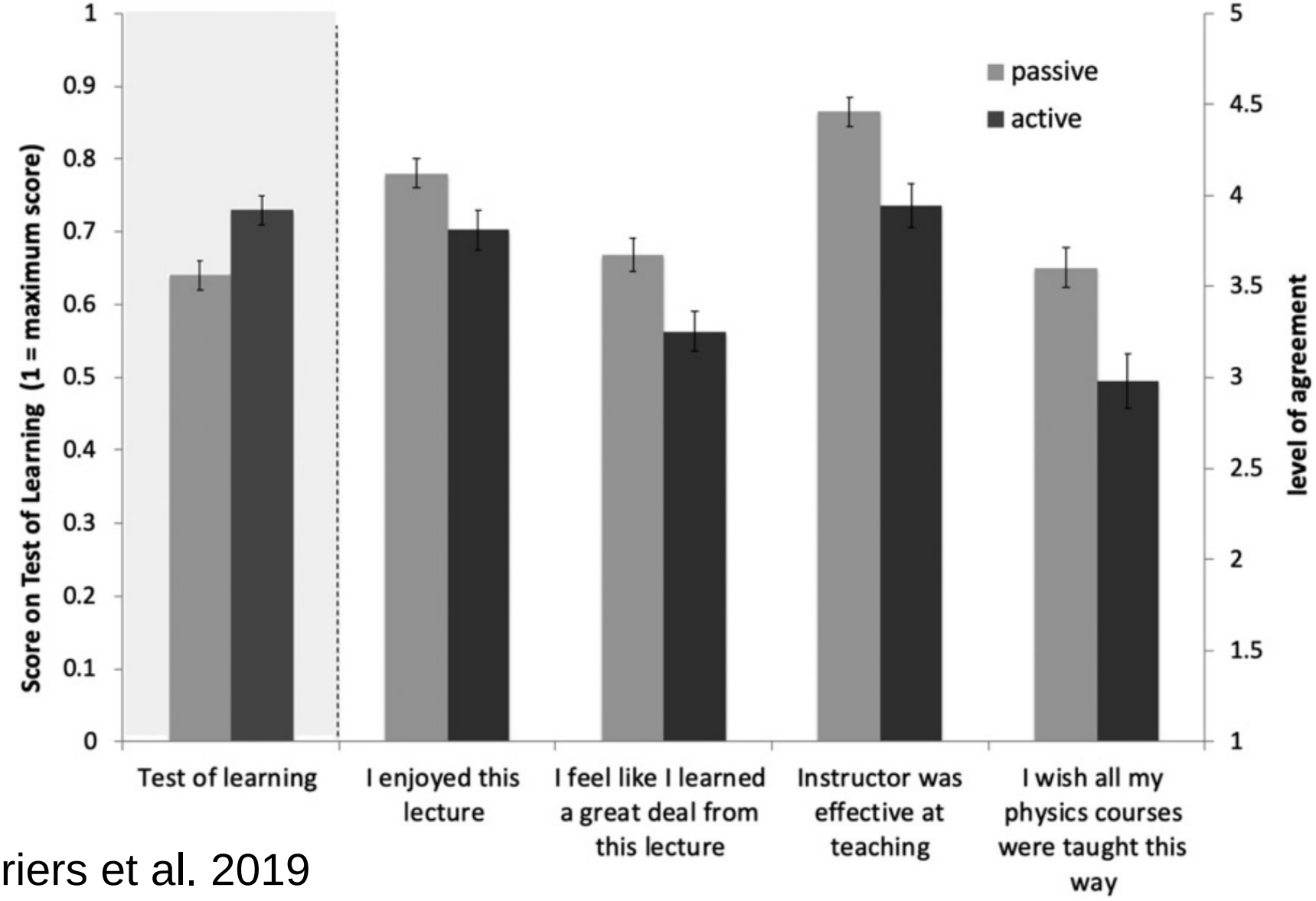
Studies show that students learn the material better when they engage in active learning:

# Active learning and participation




Deslauriers et al. 2019

# Active learning and participation

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# Active learning and participation

**Active learning feels worse for the student!**

Some ideas why that might be are:

Students encounter failure more often when actually applying new knowledge

Working through a new problem is less entertaining than listening to a well-designed lecture

# Active learning and participation

**Active learning feels worse for the student!**

Some ideas why that might be are:

Students encounter failure more often when actually applying new knowledge

Working through a new problem is less entertaining than listening to a well-designed lecture

Be aware of this effect and don’t let it discourage you.

# Active learning and participation

If you are struggling with the material or other studies-related things, you can contact me and I will help you.

# Science!

This class is about exoplanets.

But first things first: how do we actually do science?