# Grade

**Grade Projection:**
**0.4*(curved % average of 2 best midterms) + 0.3*(curved % on final exam) + 0.1*(homework % out of 400 points) + 0.2*(lab %) + bonus (0-1%)**

A: >= 95%
A-: 90% - less than 95%
B+: 86% - less than 90%
B: 82% - less than 86%
B-: 76% - less than 82%
C+: 74% - less than 76%
C: 67% - less than 74%
C-: 65% - less than 67%

pass is about 70% and 60% of the lab+obesrvation

# Final Exam Content

- ✓ Final exam is on Wednesday, May 11, 2-4pm, SLH 200.
- ✓ Same format as midterms: 60 multiple-choice questions in 60 minutes (some will carry more than 1 point). Closed book, notes, phones.

- All Chapters, except Chapter 4.
- Module on Knowledge and the Universe.

# How to study?

- ✓ Work through in-class questions.
- ✓ Work through homeworks.
- ✓ Work through midterm questions.
- ✓ Work through the preparations.

- ✓ Ask ”why” and “why not” questions as you study, don’t just look through the answers!
- ✓ Email if you have questions! (Please don’t rely on my email response on the day before exam).

# Some key concepts:

- ✓ Definitions from Chapter 1
- ✓ Dark matter, dark energy, photons, electrons, protons, neutrons, nuclei, radiation
- ✓ Electromagnetic spectrum
- ✓ Blackbody curve
- ✓ Rotation curves of galaxies
- ✓ Hubble diagram
- ✓ HR diagram, main sequence
- ✓ Nuclear fusion
- ✓ Structure of the Sun
- ✓ Light curve (context: exoplanet transits, supernovae)
- ✓ Probabilistic inference: prior, posterior, likelihood
- ✓ Equinox, solstice, meridian, zenith, nadir
- ✓ Gravitational collapse, merger, accretion
- ✓ Acceleration, deceleration
- ✓ Big Bang Nucleosynthesis
- ✓ Cosmic microwave background radiation
- ✓ Theory of relativity (what it is about)
- ✓ White dwarf, red dwarf, brown dwarf, red giant, neutron star, black hole
- ✓ Galactic halo, spiral arms, disk
- ✓ Event horizon
- ✓ Probabilistic inference: prior, posterior, likelihood

# In conclusion...

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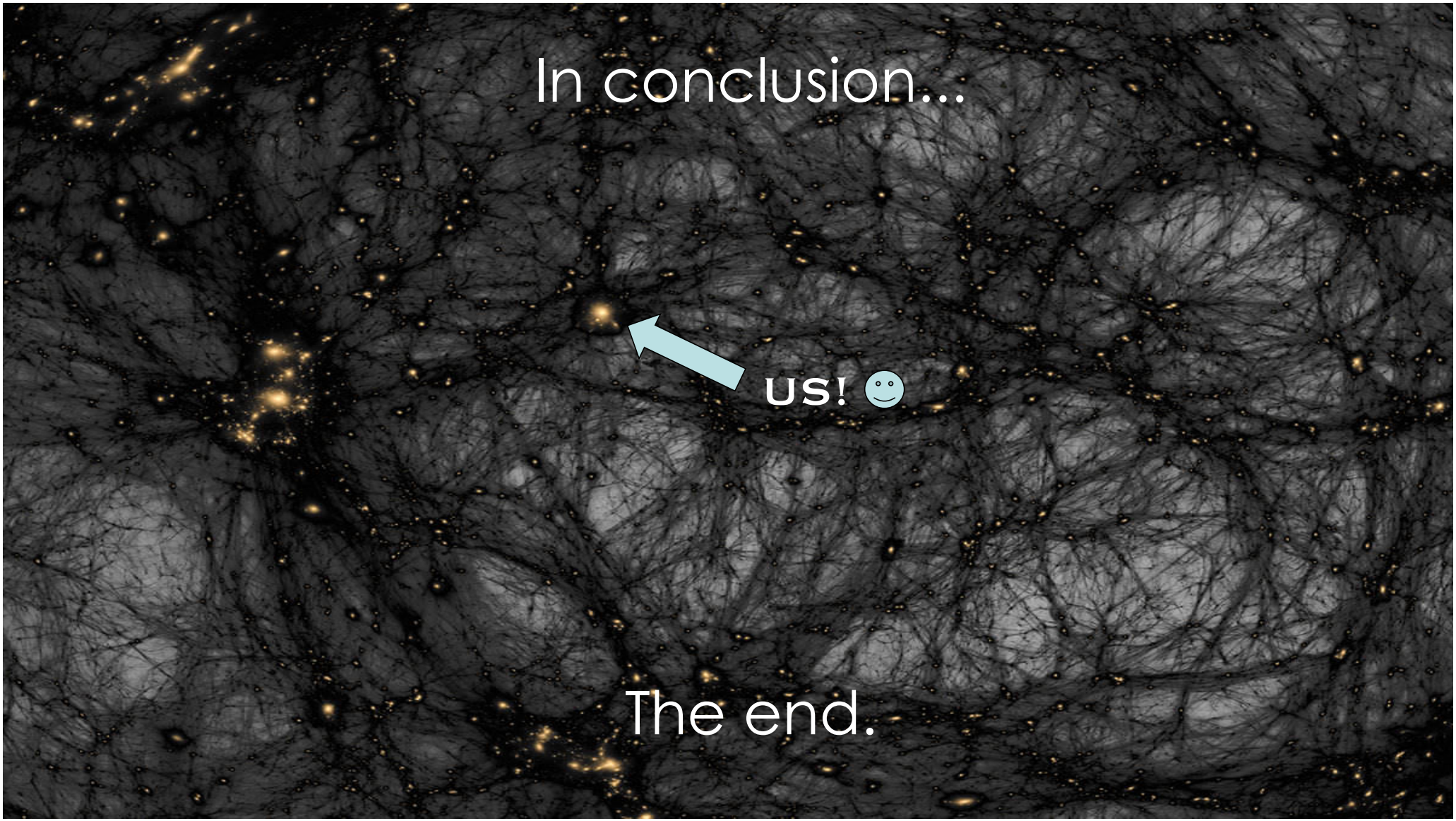
In conclusion...
US!
The end.

# Please fill out USC Learning Experience Evaluation (you got email from c-evals@usc.edu )

**For Student Proctor Use Only**

If you have agreed to serve as Student Proctor for the Learning Experience Evaluation, *once your instructor has left the classroom*, please take approximately 15 minutes to do the following:

1. Read the following statement outloud: *Learning Experience Evaluations are your opportunity to provide feedback to your instructor. USC and its faculty take these evaluations very seriously, as they provide valuable information that faculty and schools can use to improve teaching. It is important to remember that the learning process is collaborative and requires significant effort from the instructor, individual students, and the class as a whole. Please provide a thoughtful assessment of their experience, as well as of their own effort, with comments focused on specific aspects of instruction or the course. Comments on personal characteristics of the instructor are not appropriate and will not be considered. Evaluations should be completed individually with no undue influence by either a student or instructor. Should any inappropriate behavior occur, it will be reported to the Office of Institutional Research.*
2. Complete your own evaluation.
3. Observe the evaluation process to ensure all students complete the survey individually, with no undue influence from either another student or an instructor. Should anyone attempt to assert influence over the process, please contact the Office of Institutional Research at c-evals@usc.edu.
4. Conduct a poll, using a raise of hands, to determine how many students have completed the evaluation. Encourage students to complete the evaluation until approximately 80% of students in attendance indicate they have completed.
5. Notify the instructor when approximately 80% of students have completed and return to your class.
6. If your instructor decides to continue the evaluation for a few more minutes, please continue your role as a proctor until the instructor resumes classes
7. If you have questions about this process, please contact the Office of Institutional Research (c-evals@usc.edu)