# APPLICATIONS OF LENSES: CORRECTIVE LENSES AND THE TELESCOPE

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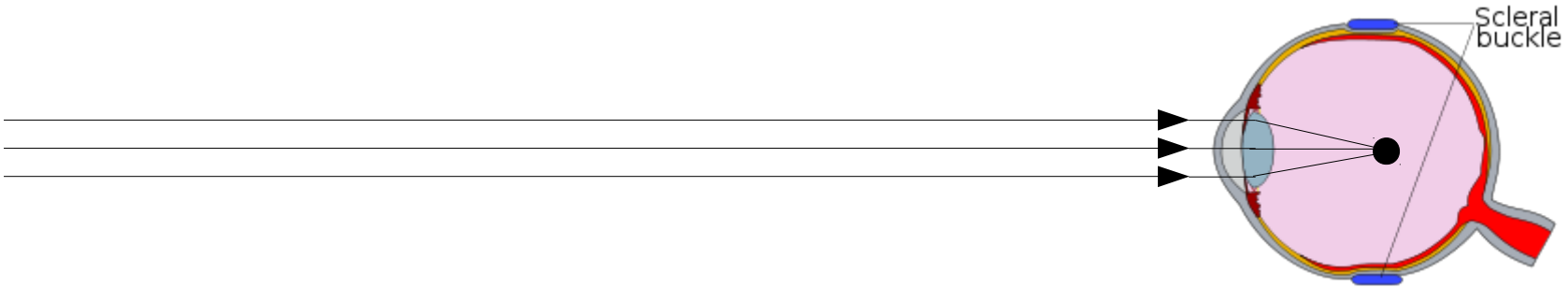
Supplementary Material for PHY1308 (General Physics - Electricity and Magnetism)

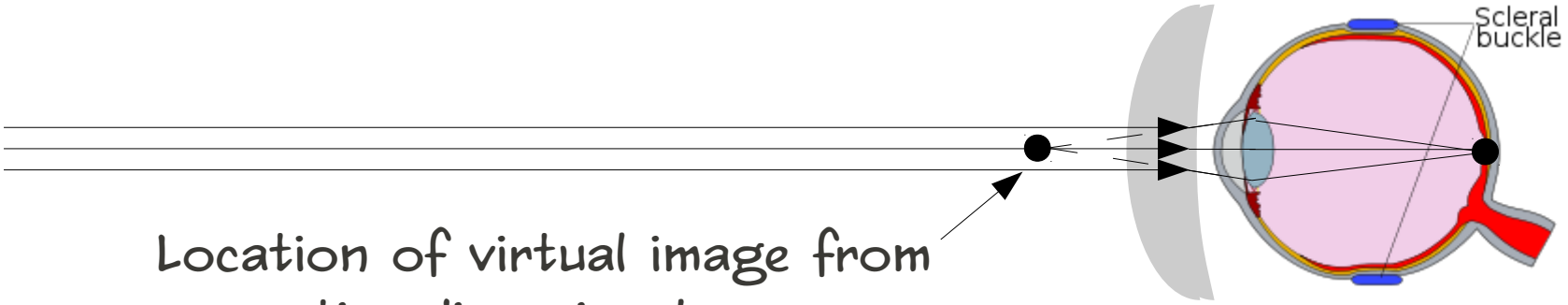
# ANNOUNCEMENTS

- Homework 14:
  - Due Monday, Dec. 6 by 5pm
- Quiz
  - today
  - covers material from homeworks 12 and 13
  - "flying solo" - no teams on this one
- Last Lecture on Monday
  - special topics, chosen by you
  - will result in multiple choice/true-false questions on final exam

# Near-sighted: cannot see distant objects



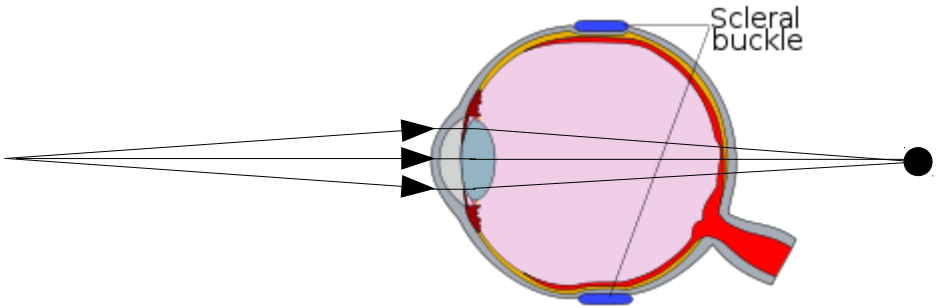

# Near-sighted: corrective optics



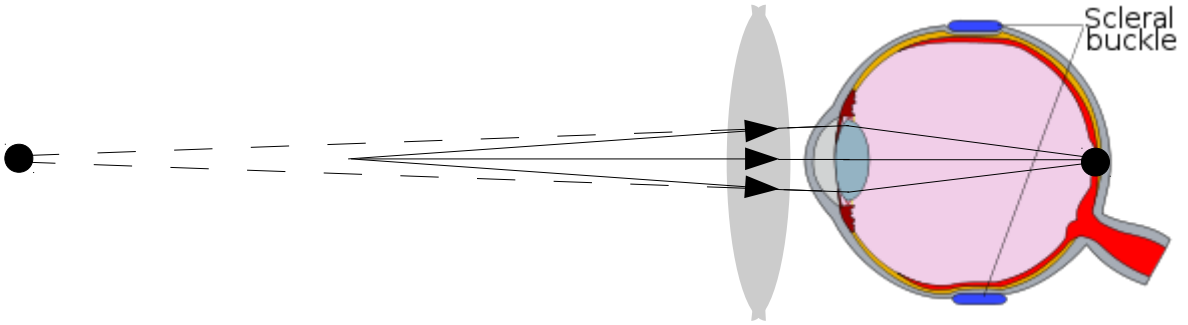

Location of virtual image from corrective diverging lens ($s'<0$), which the eye can then see

***Near-sighted individuals need corrective optics that make objects look closer than they actually are so that the eye can focus on them.***

# Far-sighted: cannot see close objects




# Far-sighted: corrective optics




Location of virtual image from corrective converging lens ($s' < 0$), which the eye can then see. Virtual image is further away than object.

***Far-sighted individuals need corrective optics that make objects look further away than they actually are so that the eye can focus on them.***

# LAST LECTURE:
# BEYOND EINSTEIN: HOW LIGHT LED THE WAY TO A DARK COSMOS

On Monday, I will deliver the final lecture of this course. It will be based on special topic suggestions, and will result in some multiple-choice or true/false questions on the final exam.

In 1905, Albert Einstein published three seminal papers. Two of those, concerning relativity and the photoelectric effect, initiated twin revolutions in our understanding of the universe. From Einstein's thinking about light, we now understand a great deal about the matter from which we are made - and how little that matter contributes to our dark cosmos.