

# 3306 physics laboratories, Spring 2025

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<https://www.physics.smu.edu/saptaparnab>



## Speed of light in a coaxial cable

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### Resources

- Weekly worksheet with mandatory and graded pre-lab submissions and information for your required preparation, experiment introductions, uncertainty analysis summary and labs: <https://www.physics.smu.edu/saptaparnab>

### Your learning outcomes today

Keep asking your instructor until you have thoroughly understood the concept of uncertainties.

- ☐ Calibrate the oscilloscope with short cables of equal length
- ☐ Replace one cable with a long cable and use the offset to calculate the speed of light
- ☐ Repeat with various lengths of the cable

Additionally you will need to know how to

- ☐ work with jupyter-notebooks

Make use of your instructor's office hours and ask them about your graded worksheet/report or about your preparation for the following week's experiment.

**Notes:**