

3306 physics lectures, Spring 2026

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https://www.physics.smu.edu/saptarnab/PH3306_Spring_2026/

Based on Simon Dalley's lectures delivered in spring 2025



WARM UP 6: Longitudinal Wave Sounds (Halliday 17.4-17.8)

Write your answers in the space following the warm-up question if you can. Write as if you are explaining to a fellow student. If you need more space, you are probably over-thinking things.

Why does sound seem quieter the further away the source is?

What exactly is the difference between sound intensity and sound level?

Why does the note played by a musical instrument sound different from a particular harmonic from the same musical instrument?

How do *beats* form and allow one to tune a musical instrument?

How do you decide which signs to use in the general Doppler equation when either the source or detector are stationary relative to the medium?