



Waves



Pandemic demos







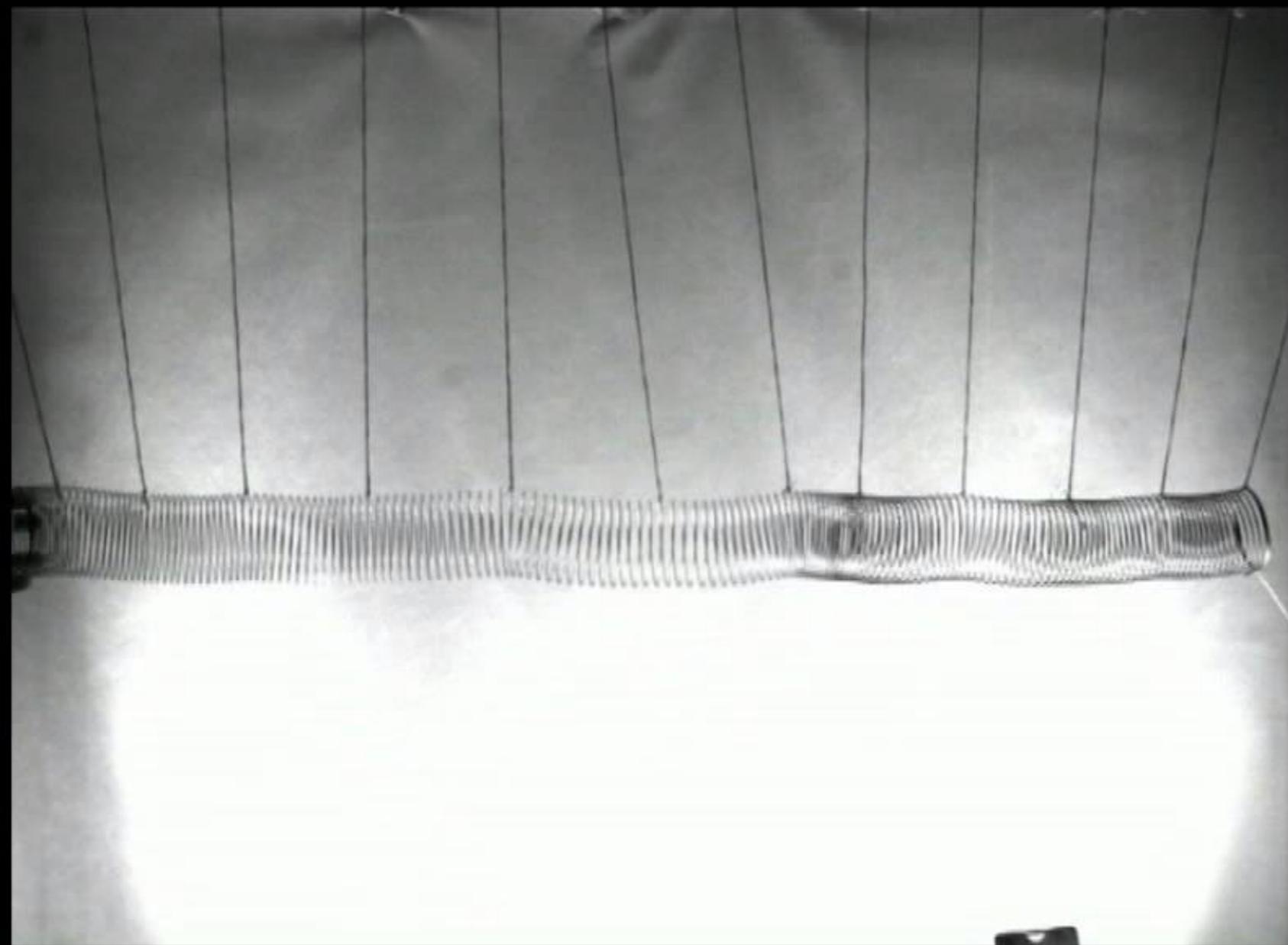
Wave on a rope

- Transverse (side-to-side) wave
- Wave travels, rope wiggles
- Amplitude
- Wavelength
- Wave speed
- Restoring force

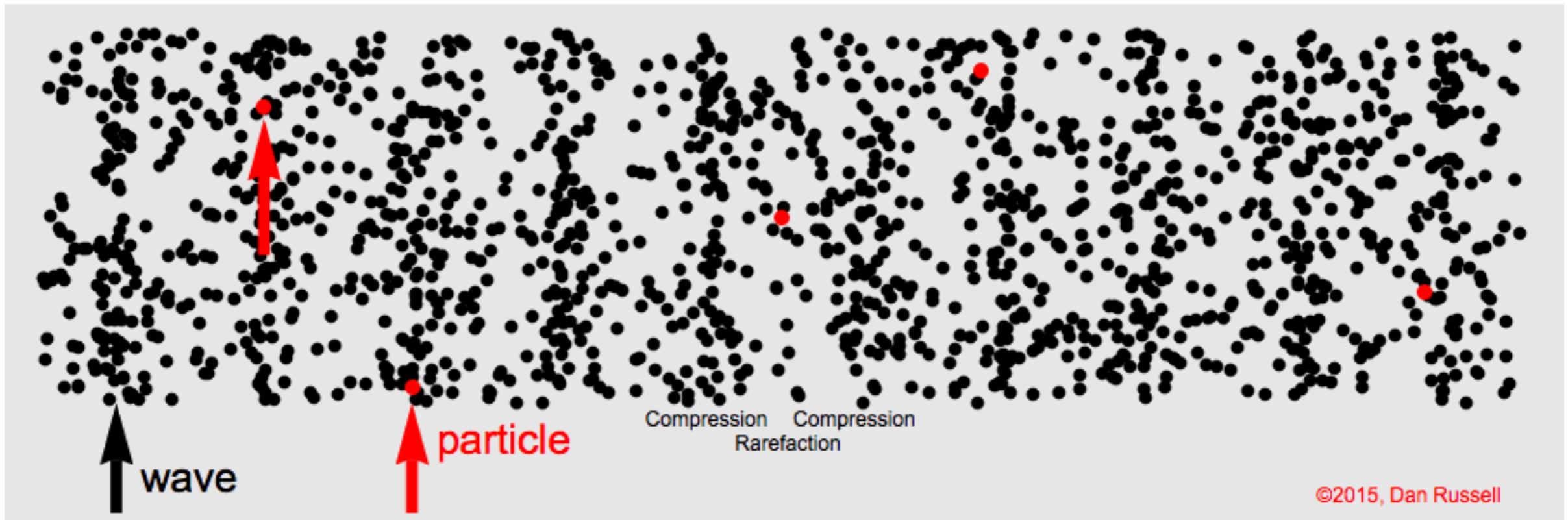
Wave speed (tubing)

- Restoring force & wave speed
- Stiffer the material, faster the wave





Parts of medium wiggle, wave moves

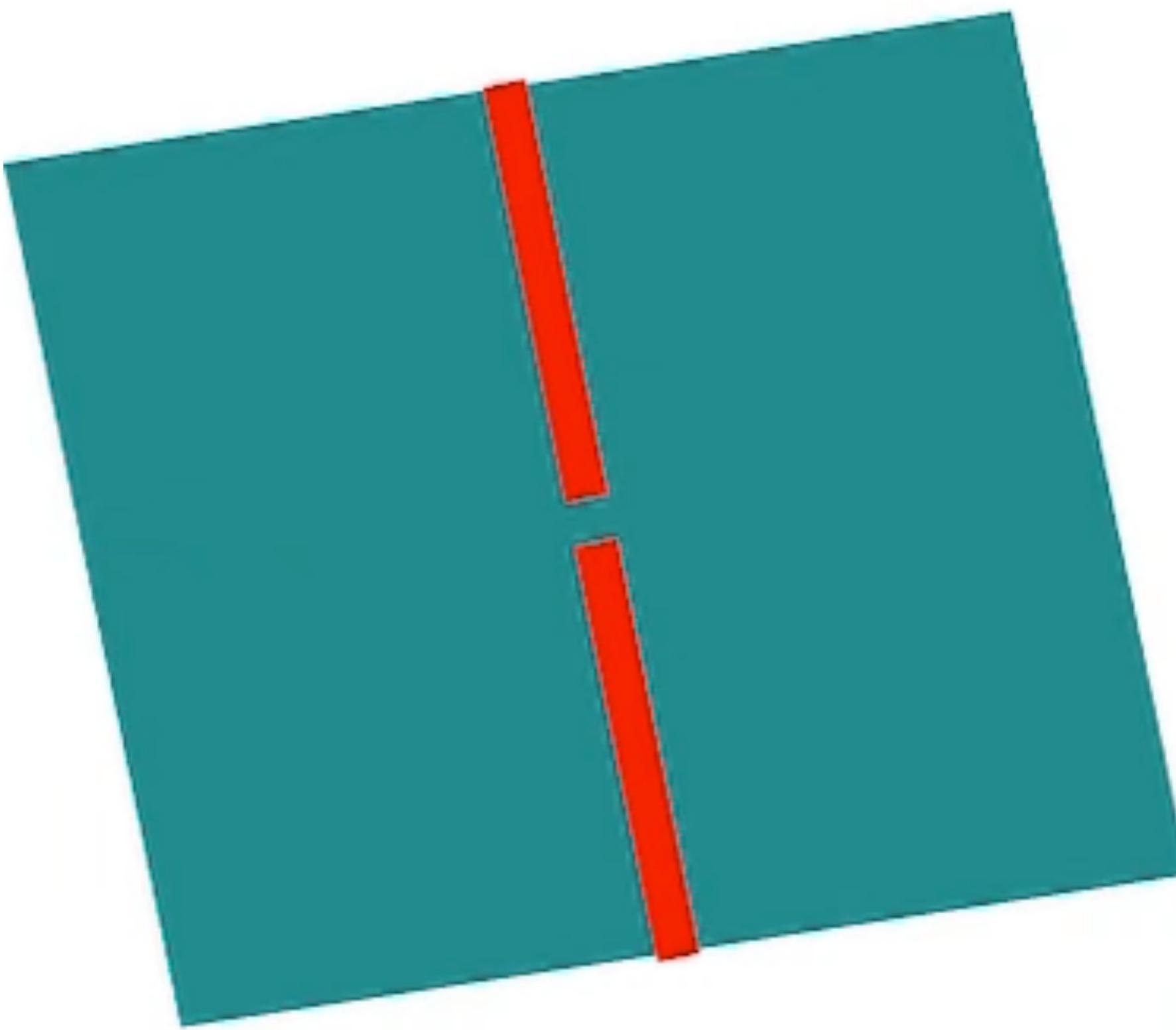


Kinds of waves

Kinds of waves

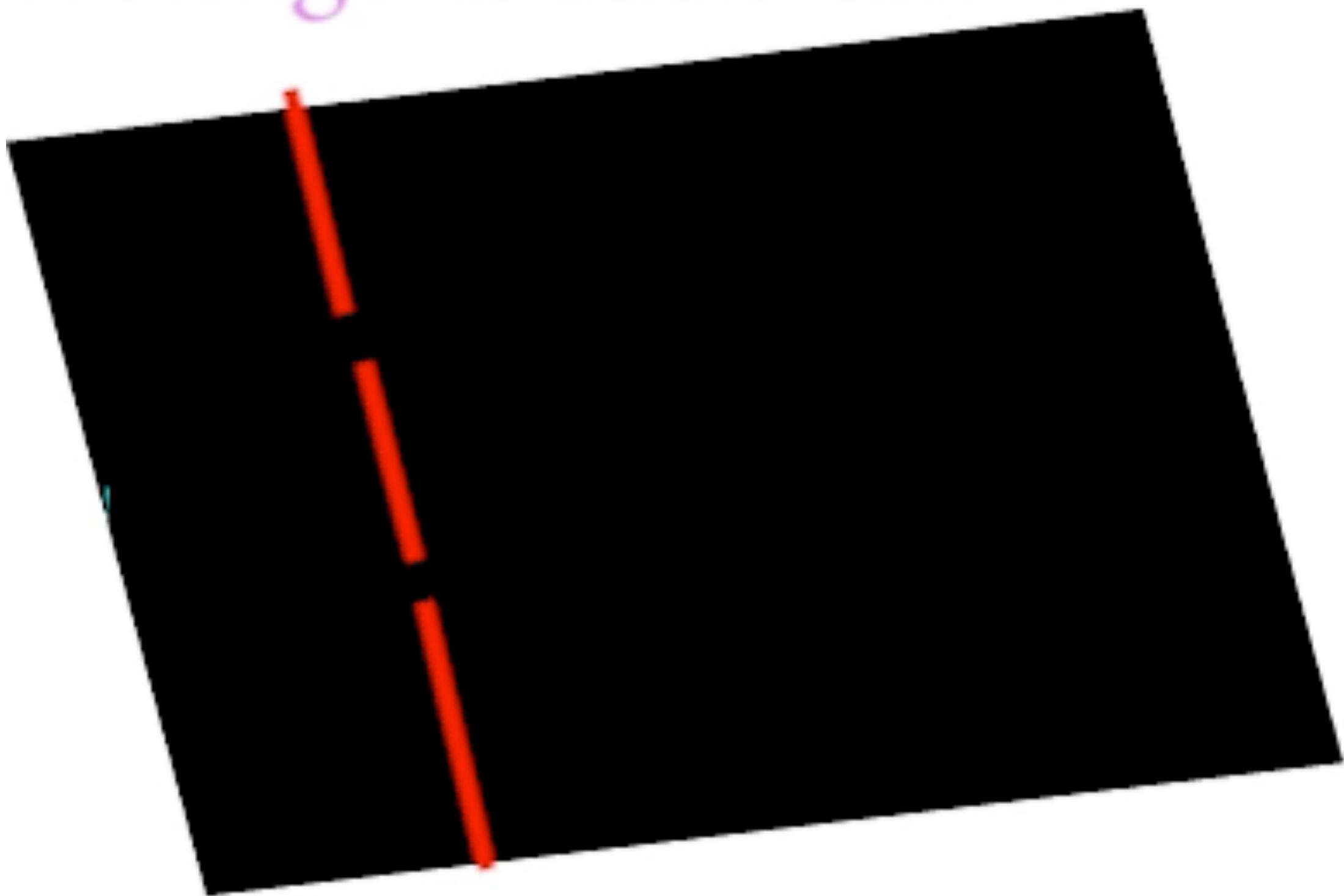
- Water waves
- Sound (in air)
- Earthquakes
- Sound in water or metal
- Waves in the sun

Diffraction & interference



black

Young's double slit



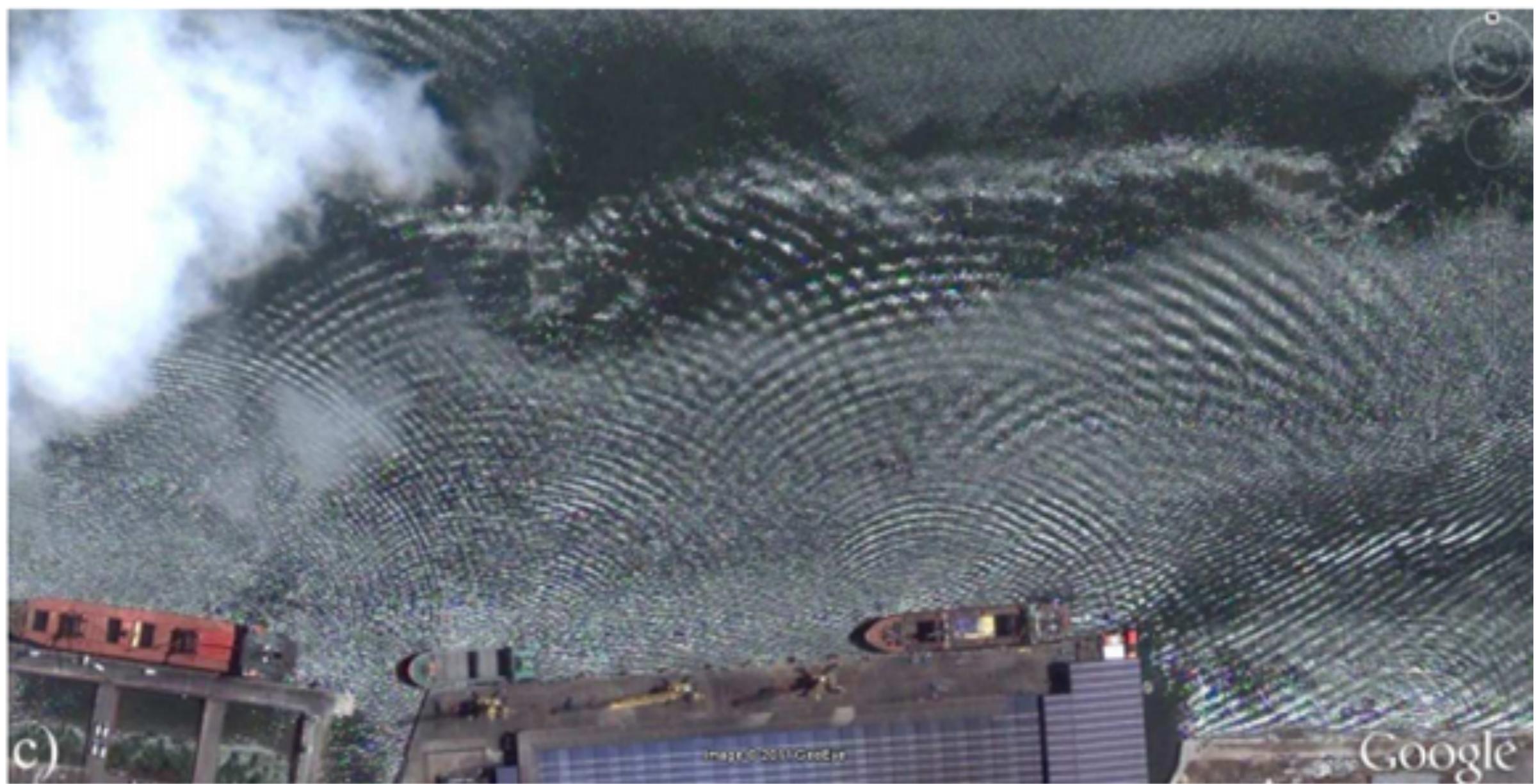
Interfering waves



Interference (examples)







c)



M. Di Lorenzo for Renderosity.com

ArsTechnica reading



The Curious Observer's Guide to Quantum Mechanics