$Creating\ Diagrams\ with\ TikZ$

Plotting functions

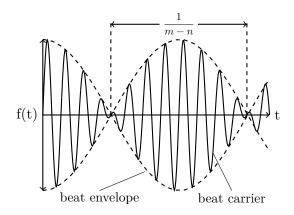


Figure 1: An illustration of beat frequency.

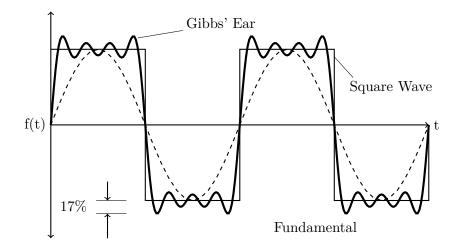


Figure 2: An illustration of Gibbs' phenomenon.

Standard lab equipment

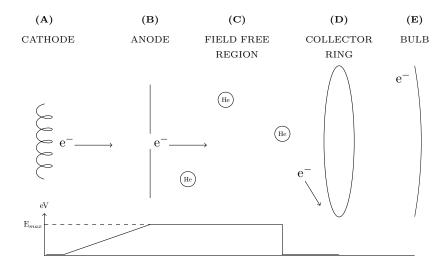


Figure 3: An illustration depicting the journey of an electron within the Franck-Hertz tube. The energy of colliding electrons is charted along the bottom of the diagram.

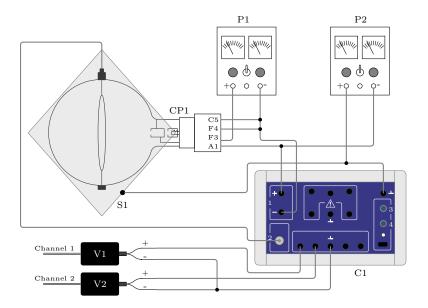


Figure 4: Wiring diagram for the experiment. Shown in the diagram are the cathode power supply, P1, the anode bias power supply, P2, the Vernier voltage probe recording the ramping voltage, V1, the Vernier voltage probe recording the collector ring current, V2, the critical potential tube controller, C1, the critical potential tube, CP1, and the shielding meant to isolate the tube from EM interference, S1.

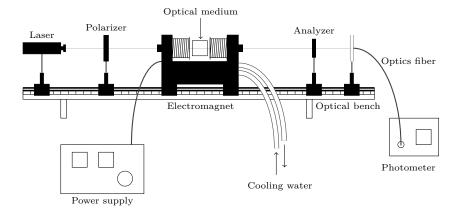


Figure 5: Experimental Setup

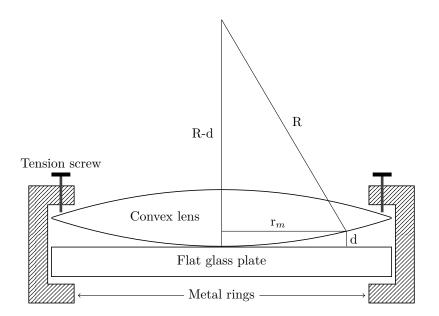


Figure 6: Experimental setup for the investigation of Newton rings.

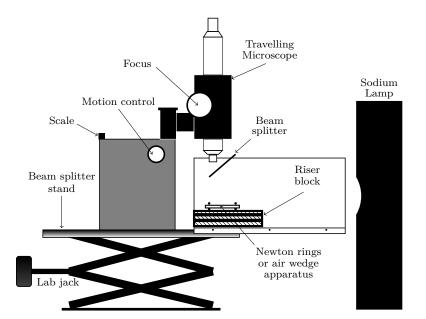


Figure 7: Experimental setup used to measure the spacing between Fizeau bands.

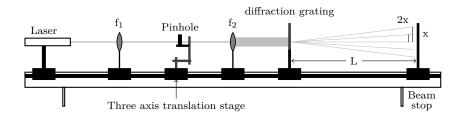


Figure 8:

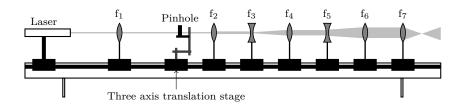


Figure 9: "Laser beams"

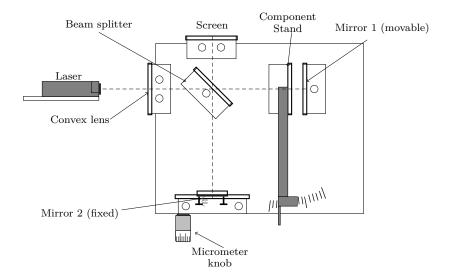


Figure 10: A diagram of the interferometer used in this experiment.

$Circular\ Shapes$

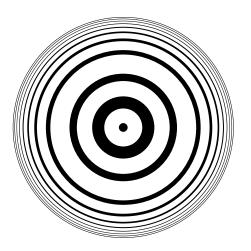
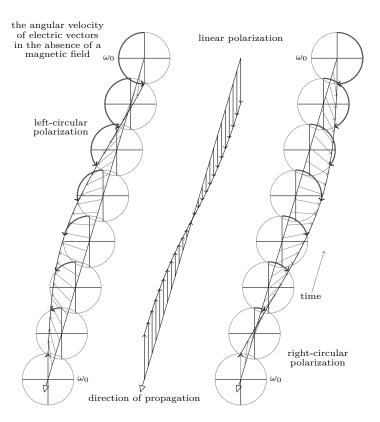


Figure 11: An illustration of Newton rings.

$Isometric\ diagrams$



 $\begin{array}{lll} {\rm Figure} & 12 {\rm :} & {\rm Linearly} & {\rm polarized} \\ {\rm light} & & \\ \end{array}$

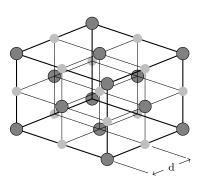
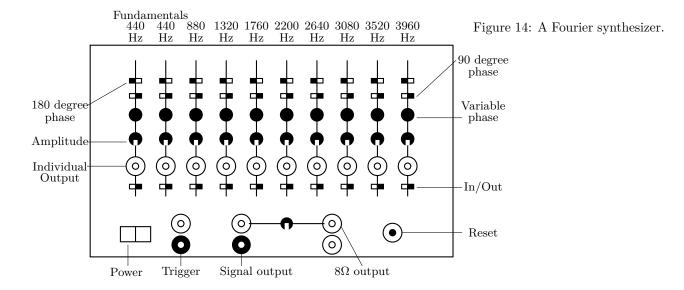
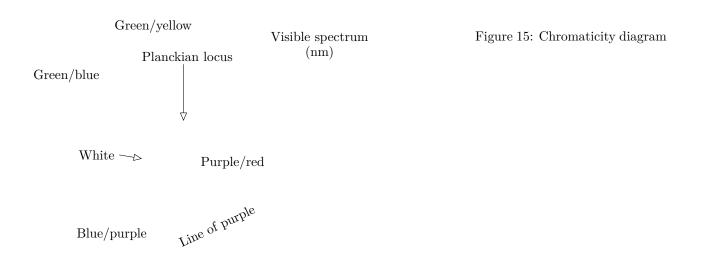


Figure 13: Crystalline structure of a Lithium Fluoride.



 $Circuit\ diagrams$

Drawing on top of images



Cables, tubes, and pipes

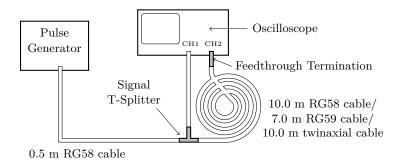


Figure 16: A diagram of the experimental set up for the determination of signal attenuation in RG58, RG59, and twinaxial cables.