

Ph291E Lab 4 – Bessel & Telescope

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November 13, 2025

1 Purpose

Using Bessel’s method to determine the focal lengths of two different converging lenses, we will construct a simple refracting telescope using these lenses and determine its magnification both experimentally and theoretically.

2 Data

Part A: Pfund’s Method

Table 1: Petri Dish Thickness

Thickness (mm)	Inst. Error (mm)	Random Error (mm)
2.180		
2.190		
2.185		
2.185		
2.195		
2.180	0.005	0.002
Mean Thickness		2.186 mm

3 Calculations

4 Results

5 Conclusion

6 Answers to questions

Question 1