

Exercise 5: Solve a MAD Harker

Use compass, ruler, graph, colored pencils. Do the vector addition.

measured intensities

$$F_{\lambda_1} = 12.0$$

$$\alpha_{\lambda_1} = \text{????}$$

$$F^{-\lambda_2} = 12.0$$

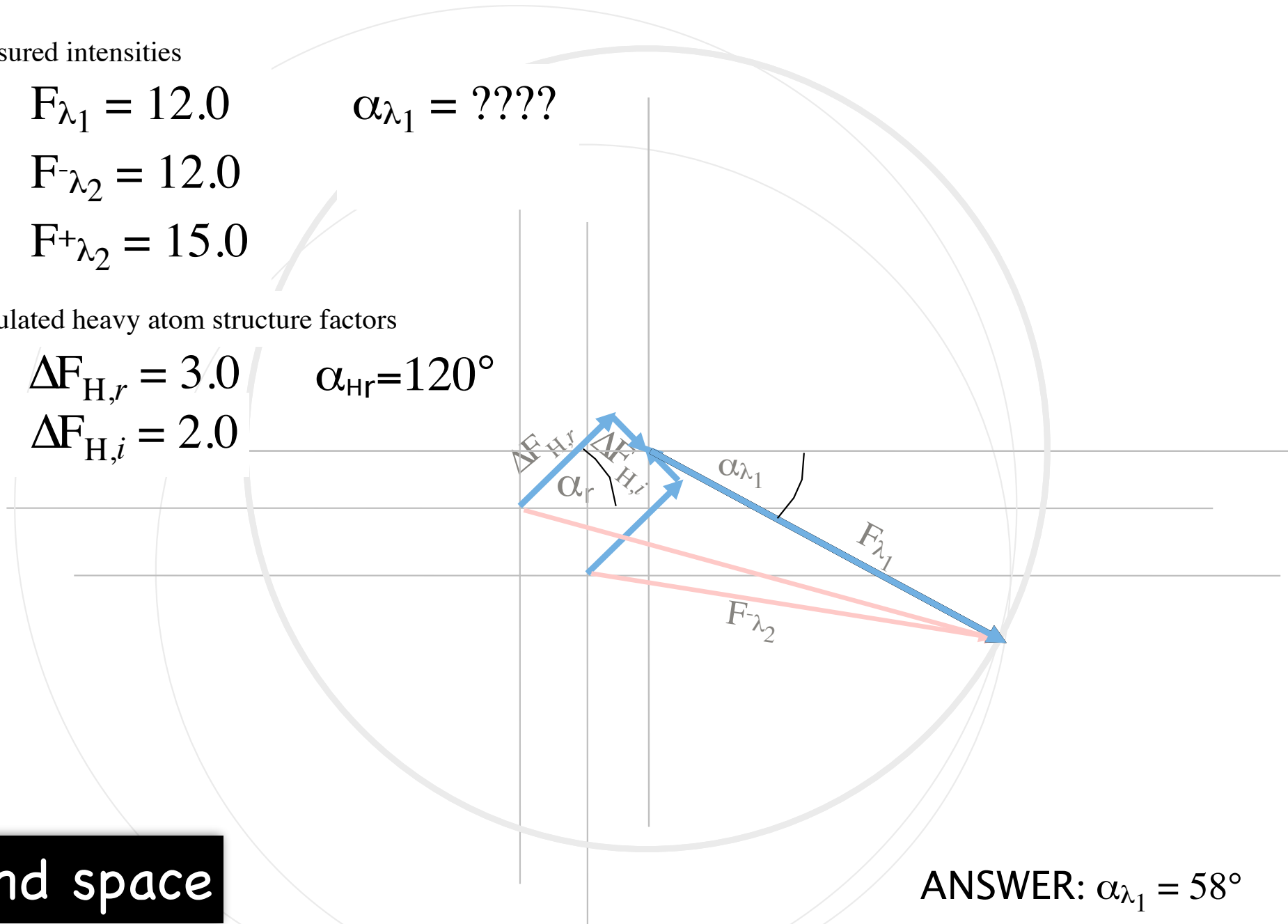
$$F^{+\lambda_2} = 15.0$$

calculated heavy atom structure factors

$$\Delta F_{H,r} = 3.0$$

$$\alpha_{Hr} = 120^\circ$$

$$\Delta F_{H,i} = 2.0$$



Argand space

ANSWER: $\alpha_{\lambda_1} = 58^\circ$