Experiment 1: The Michelson Interferometer

D line = spectral line for Sodium

• We moved the laser to center the beam on M1.
• We then moved the compensator beam splitter to position the beam at the center of M2.
• After doing this 2 bright dots appeared on the whiteboard. When we read the compensator in, a third dot appeared to the right of the other two dots.
• When we added the converging lens, a large smeared red light on the board.
• Our laser tilt was off, causing the blurriness in our lines.
• After adjusting the laser, we were able to see more distinct lines.

Due to continuing complications with aligning the lasers and little time left in the period, we decided to answer the prelab question and restart the procedure next lab session.