# EE119 Lab 7: Interferometry

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## Michelson Interferometer

1. Identify the components of the Michelson Interferometer that is set up in the lab. Do you see fringes?
2. What is the purpose of the pinhole between the laser and the beamsplitter?
3. How much can you turn the knobs on the mirrors before the interference goes away?

## Other Interferometry Fun

1. Turn on the white light source and look at the diffraction grating. In what direction is the grating blazed? How can you tell?
2. Look at the mirrors of the interferometer. Are they identical? Do they reflect all colors equally? If you want, you can illuminate one of the dichroic mirrors with the reflection of the grating and look at the reflection and transmission wavelengths (If you do this, you have to re-build the Michelson interferometer for the next group). What type of material is on these mirrors?
3. Take two microscope slides and press them together. Do you see Newton's rings forming? If you illuminate the slide with a laser, do you see concentric rings?