A screenshot of a game

Description automatically generated with low confidenceDiode lasers emit photons through the harmonic oscillation of electrons between energy levels. When provided with optical feedback, the incoming beam acts as a driving force for the oscillations of electrons between energy gaps equal to the energy of the beam’s constituent wavelengths. This stimulates the emission of photons with the same wavelengths as those in the reflected beam, which is what we expect to measure with our spectrometer.