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Finding the noise at the edge of laser injection locking.[1] ETHAN WELCH, DALLIN DURFEE, JAROM JACKSON, Brigham Young Univerisity — Injection locking is a way to transfer the frequency and linewidth of a stabilized laser to a free running laser. However, the lock only works as long as the free-running wavelength of the injected laser doesn't drift too far from the wavelength of the master laser. I am searching for possible noise as the laser reaches the edge of its stable lock range. If this noise exists, then it will be possible to use a feedback controller to keep the noise at a minimum and therefore prevent loss of the injection lock.

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