Abstract Submitted
for the 4CF17 Meeting of
The American Physical Society

Using Spectra and Amplitude to Stabilize an Injection Locked Laser.[1] ETHAN WELCH, DALLIN DURFEE, JAROM JACKSON, Brigham Young University — An unstable laser can be stabilized by being injection locked by a more stable laser. However, this method is limited because the injection lock only functions when the natural frequencies of both lasers are close together. When the unstable laser drifts too far, it ceases to be stabilized. By analyzing the spectral output of the laser, or by analyzing the overall power output, we can provide active feedback to stabilize the injection lock.

[1]NSF Grant

Ethan Welch
Brigham Young University

Date submitted: 21 Sep 2017 Electronic form version 1.4