Abstract Submitted
for the DAMOP05 Meeting of
The American Physical Society

High Temperature Calcium Vapor Cell for Absorption Spectroscopy on the Intercombination Line CHRISTOPHER ERICKSON, DALLIN DURFEE, SCOTT BERGESON, Brigham Young University — We report on construction of a high temperature vapor cell for spectroscopy on the transition from the ground state to the 4s4p-$^3P_1$ state in calcium. The cell has a unique dual-chamber design that minimizes calcium loss and prevents window coating. The cell was designed to operate at a temperature of 750 degrees C to produce a vapor density of about 10^{21} atoms/m^3.

Donald Griffin
Department of Physics, Rollins College

Date submitted: 28 Jan 2005 Electronic form version 1.4