# A Radiation Course based upon Numerical Methods

28.10.2016

# Exercise No. 1 – Calculation of Absorption Coefficients

1. Choose an individual line and perform calculations over a restricted frequency range for four different pressures (1hPa, 10hPa, 100hPa, 1000hPa). Keep the temperature and constituent mixing ratio constant.

**Questions:**

* + How does the shape of the spectral lines change?
  + How does the absorption coefficient in the line centre change, if pressure is changed?