

Master thesis Environmental Physics

TOPIC: Retrieval of temperature from atmospheric spectra measured by ground based Fourier transform spectroscopy

In this thesis atmospheric spectra will be used to retrieve a temperature profile in the troposphere and lower stratosphere. The thesis encompasses adapting the software package SFIT4 to the retrieval of temperatures from spectra. The resulting temperatures will be validated using radio sonde measurements and the effects on measurements of trace gas profiles will be evaluated.

REQUIREMENTS: Computational skills are required, preferably fortran and python. Beneficial are basic knowledge of the spectroscopy of molecular gases and in atmospheric chemistry and dynamics.

Contact:

Dr. Mathias Palm
NW1, U3235
Universität Bremen

Email: [mathias.palm\(at\)uni-bremen.de](mailto:mathias.palm@uni-bremen.de)
Tel: 0421 21862179