Agenda for the <u>third (fourth)</u> SFIT4 Retrieval Workshop
November 4 – 6 2019
NCAR, Boulder CO
FL-0 Rm 2512

Workshop format:

The workshop will be held in the ACOM meeting room 2512 on the second floor of building FL-0 of the Foothills Lab of NCAR in Boulder. The room has one large round table, and a projector ideal for presentations, group discussions, and presenting examples from your laptop for discussion. We have only three days and believe they will be full. We have two goals for the meeting: 1. To present detailed information on the theory of SFIT and running it and 2. Discuss and answer specific questions and answers attendees bring. The agenda tries to reflect these goals.

Notes:

Have the latest working version of SFIT4 and the latest linelist. Go here for the:
https://wiki.ucar.edu/display/sfit4/November+2018+Pre-Release
Also see/get there the latest linelist with ATM 20190910 !
When you arrive you may have to go to the main entrance at bldg. FL-2 and ask the receptionist to contact one of us below.

Contacts:

Jim Hannigan, office FL-0, Rm 3588, 303-497-1853, cell 720 318 8776
Ivan Ortega, office FL-0 Rm 3564, 303-497-1861, cell 303-217-1219
Bonnie Slagel, office FL-0 Rm 2128, 303-497-8318

Monday, 4 November

Time	Who		Topic
08:00	J Hannigan, B Slagel		Doors open, Attendee Logistics
08:30	J Hannigan		Welcome, Meeting Logistics, Introduction
09:15	M Palm		SFIT4 Theory and Overview
10:30		Break	
10:50	J Hannigan		Spectroscopy
			i. Linelists
			ii. Isotopes
			iii. TIPS
11:50	M Palm		Forward & Retrieval Parameters
12:50		Lunch	
14:00	J Hannigan		Band Parameters
14:30	All		Open Discussion, Questions, Examples
15:20		Break	
15:40	All		Open Discussion, Questions, Examples
18:00			Adjourn for Day

Tuesday, 5 November

08:30	I Ortega		Python Tools for Batch running SFIT
			i. Database creation
			ii. File system structure
			iii. Required input data, files formats
			iv. Spectra preparation
			v. Fitting and re-entering H_2O as input
			vi. Running layer 0, 1
10:00	B Langerock		Network AC/AQ
			i. Procedures,
			ii. Criteria
10:30		Break	
10:50	B Langerock		Implementing Uncertainty Calculations
11:50	M Chou		Channeling Issues in SFIT4
12:10	M Palm		K_b Parameters
12:40		Lunch	
13:50	All		Open Discussion, Questions, Examples
15:00		Break	
15:20	All		Open Discussion, Questions, Examples
18:00		Adjourn for Day	

Wednesday, 6 November

08:30	M Palm		Issues Pertaining to Low resolution spectra
			i. Wide spectral bands
			ii. Introduction to Emission spectra
09:30		Break	
09:50	I Ortega		Python Tools for Batch running SFIT cont.
			i. Plotting results
			ii. HDF creation
			iii. Latest Updates
			iv. Conversion to Python 3
10:40	M Palm		Interpreting and Using Averaging Kernels
11:10	J Hannigan		Diagnostics, Techniques
11:50	All		Discussion of Morning Topics
12:30		Lunch	
13:15	All		Open Discussion, Questions, Examples
15:00		Break	
15:20	All		Open Discussion, Questions, Examples
18:00		Workshop Adjourn	
19:00	All	Dinner at a nearby brewpub	