**Instructions on MRSCloud compiling**

1. Installation
   * Download VirtualBoxVM
   * Download Ubuntu (I’m using v20.04).
   * Download MATABL 2013a (https://www.mathworks.com/downloads)
   * Install Ubuntu in VirtualBox (https://brb.nci.nih.gov/seqtools/installUbuntu.html)
   * Install MATLAB 2013a in Ubuntu
   * Setup a share drive between your mac and the VM (optional)
   * Copy the whole MRSCloud folder from Mac to Ubuntu in the MATLAB directory (or setup a Github in Ubuntu if possible)
2. MRSCloud testing (in Ubuntu Matlab 2013a)
   * Copy and paste files that have changes from your Mac to Ubuntu
   * In *simMRS.json*, change the path of the directories
   * In *run\_simulations\_cloud.m*

* Uncomment the following lines (Ln 62-64).

%%%%%%%%%%%%%%%%%%%%

c = parcluster('local'); % build the 'local' cluster object

nw = c.NumWorkers; % get the number of workers

matlabpool (nw); % assign the maximum number of available cores

%%%%%%%%%%%%%%%%%%%%

* Uncomment the following lines (Ln 152).

%%%%%%%%%%%%%%%%%%%%

matlabpool close % only for MATLAB R2013a or before

%%%%%%%%%%%%%%%%%%%%

* Comment the following lines (Ln 196-199)

%%%%%%%%%%%%%%%%%%%%

% out = fit\_plotBasis(basis, ss, 1);

% set(gcf, 'Color', 'w','renderer','painters');

% saveas(out,fullfile(save\_dir,['basis-set' '\_' subspecName{ss},'.pdf']),'pdf');

% close;

%%%%%%%%%%%%%%%%%%%%

\* Ln 62-64 and Ln 152: open and close parallel computing

\* Ln 196-199: plot figure crashes in my Matlab2013a

1. MRSCloud compiling
   * Comment the following lines (Ln 12)

% json\_input = '/Users/steve/Documents/My\_Studies/MRSCloud/simMRS.json';

* + Uncomment the following lines (Ln 196-199)

%%%%%%%%%%%%%%%%%%%%

out = fit\_plotBasis(basis, ss, 1);

set(gcf, 'Color', 'w','renderer','painters');

saveas(out,fullfile(save\_dir,['basis-set' '\_' subspecName{ss},'.pdf']),'pdf');

close;

%%%%%%%%%%%%%%%%%%%%

* + Run *buildall\_linux\_SH.m*
  + Send the following 5 files to Yue Li <yli51@jh.edu>
  + run\_simulations\_cloud.ctf
  + run\_run\_simulations\_cloud.sh
  + run\_simulations\_cloud
  + simMRS.json
  + readme.txt