

## Research Code for Fitting Multiple Gaussian Graphical Model

### Compilation

You need to have [R](#) installed before compiling the code. You have to install R from source on a linux machine.

To compile the C/C++ code, just type `make` in the root directory. To recompile, first type `make clean`, then type `make`.

### Example

To run the provided example, just excute `example.R` file in R

```
source("src/R/example.R")
```

The solution path for convex and non-convex method are stored in a list object `sol_path`, consisting of two arrays: `sol_nonconvex` and `sol_convex`, with the first one referring to the solution path using truncated  $L_1$  penalty and the second one referring to that using  $L_1$  penalty. The array indices are arranged in a way such that `sol_nonconvex[,,j,i]` is referring to the solution corresponding to grid point `(Lambda1.vec[i], Lambda2.vec[j])`.