

# Bootstrap selection comparison: subsample selection efficiency

created at Jan/20/2019

upadated at Apr/20/2022

## File structure

the Python packages and simulation for bolasso and bsolar comparison on subsample selection efficiency at Section 4 of the paper.

- **supporting functions**

- **./numerical\_result** : the folder of all numerical results, saved as ".p";
- **bolasso\_parallel.py** : the Python package "bolasso" (parallel computing);
- **bsolar.py** : the Python package "bsolar";
- **costcom.py** : the package to compute the regression error;
- **debug.sh** : (for macOS and Linux only) the bash file for bug testing of all .py files here.
  - in Mac OS or Linux, open terminal and switch to this folder; run "bash debug.sh" command
  - it will produces all the test plots, results and tables;
  - if you find no error during the procedure and the bash file ends normally, there is no bug of all the packages in this folder.
- **solar** and **solar\_parallel.py** : the Python package "solar";
- **bootstrap\_demo\_parallel.py** : all the simulation functions (computation and plotting functions) that bsolar and bolasso require in the simulation;

- **simulations**

- **subsample\_frequency\_bolasso\_bsolar.ipynb** : the simulation for bolasso-bsolar comparison on subsample selection efficiency;