

# Demonstration of Python packages "solar", "bsolar", and "bolasso"

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## File structure

the step-by-step walkthrough of "bolasso\_parallel", "solar\_parallel" and "bsolar\_parallel.py"

- **supporting functions**
  - **simulator.py** : the data generating package;
  - **costcom.py** : the package to compute the regression error;
  - **solar.py** : the Python package "solar";
  - **solar\_parallel.py** : the Python package "solar" (parallel computing);
  - **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\_simul\_demo.py** : all the simulation functions that the solar demonstration needs.
- **demonstrations**
  - **bsolar\_walkthrough**, **bolasso\_walkthrough** and **solar\_demo.ipynb** : the step-by-step demonstration for bsolar, bolasso and solar.