Solar-lasso comparison

created at Jan/20/2019

upadated at Apr/20/2022

File structure

> the Python packages and simulation for lasso and solar at Section 4 of the paper

- **supporting functions**
  - **./figures** : the folder of all detailed graphical results, saved as ".pdf";
  - **./numerical_result** : the folder of all numerical results, saved as ".p";
  - **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" commmand
    - 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.
  - **costcom.py** : the package to compute the regression error;
  - **solar_parallel.py** : the Python package "solar" (parallel computing);
  - **simulator.py** : the data generating package.
  - **simul_plot.py** : all the simulation functions (computation and plotting functions) that solar and lasso require in the simulation;

- **simulations**
  - **simul_solar_lasso.ipynb** : the simulation for lasso and solar.