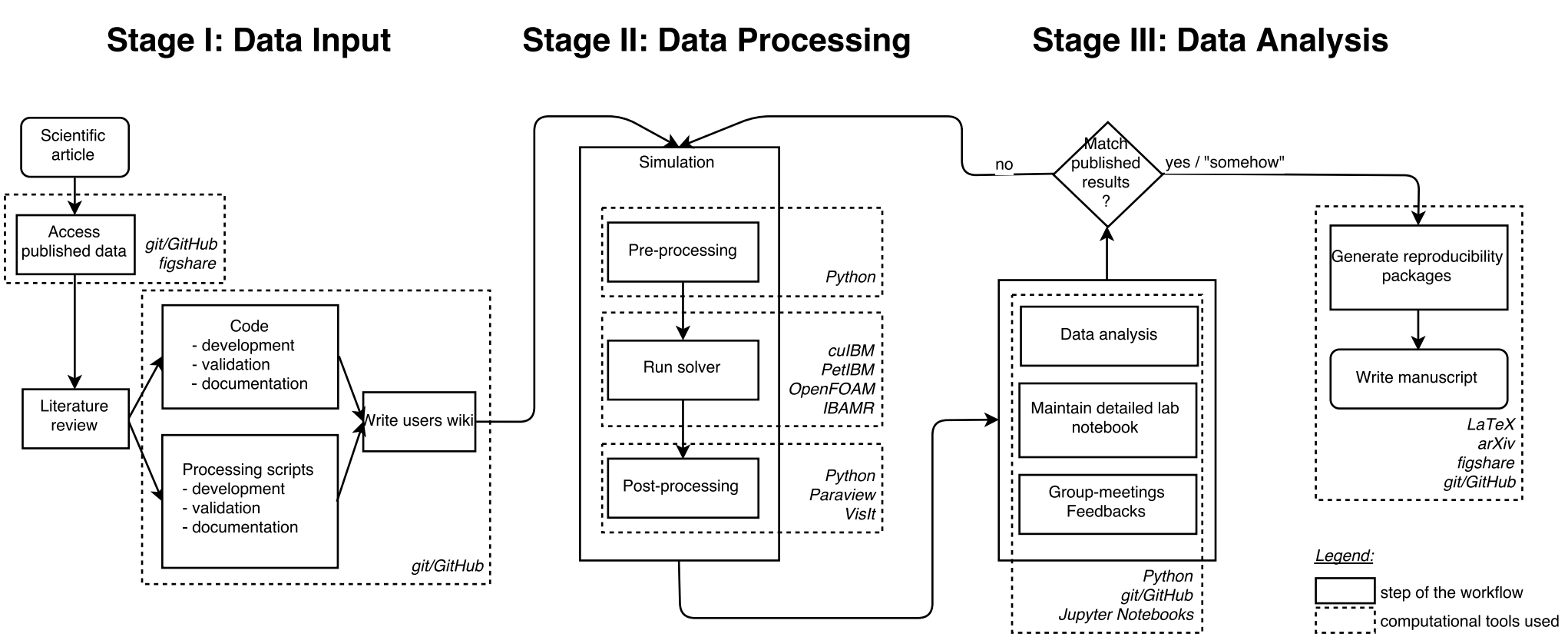
Stage I: Data Input
Stage II: Data Processing
Stage III: Data Analysis
Scientific article
Access published data
git/GitHub
figshare
Literature review
Code
- development
- validation
- documentation
Processing scripts
- development
- validation
- documentation
Write users wiki
git/GitHub
Simulation
Pre-processing
Python
Run solver
cuIBM
PetIBM
OpenFOAM
IBAMR
Post-processing
Python
Paraview
VisIt
Match published results ?
no
yes / "somehow"
Data analysis
Maintain detailed lab notebook
Group-meetings
Feedbacks
Python
git/GitHub
Jupyter Notebooks
Generate reproducibility packages
Write manuscript
LaTeX
arXiv
figshare
git/GitHub
Legend:
step of the workflow
computational tools used