Structural behavioral economics

Working group

October 7, 2019

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Github

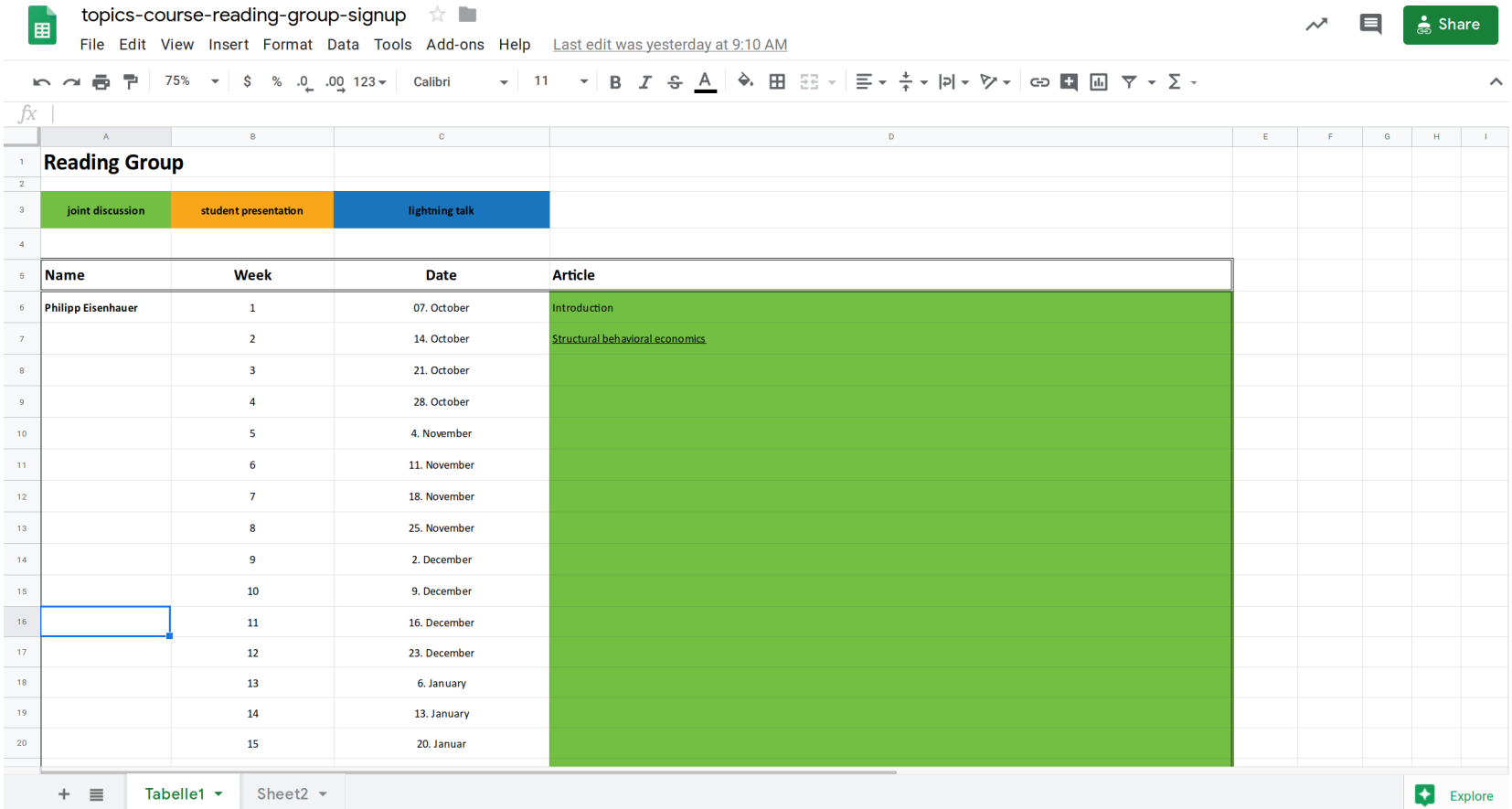
Motivation

General setup

- joint discussion of selected topic (45 - 60 minutes)
  - scientific computing
  - research article
  - research project
- student contributions
  - presentation (20 minutes, up to 10 slides)
  - lightning talks (5 minutes, no slides)

- Wednesday, noon
  - deadline for student contributions
  - announcement of selected topic
  - selection of student presentation
- Monday, lecture
  - joint discussion
  - student presentation (peer-grading)
  - lightning talks

Figure: Signup process



topics-course-reading-group-signup

File Edit View Insert Format Data Tools Add-ons Help Last edit was yesterday at 9:10 AM

Share

Reading Group

joint discussion	student presentation	lightning talk

Name	Week	Date	Article
Philipp Eisenhauer	1	07. October	Introduction
	2	14. October	Structural behavioral economics
	3	21. October	
	4	28. October	
	5	4. November	
	6	11. November	
	7	18. November	
	8	25. November	
	9	2. December	
	10	9. December	
	11	16. December	
	12	23. December	
	13	6. January	
	14	13. January	
	15	20. Januar	

Tabelle1 Sheet2 Explore

Tooling

OpenSourceEconomics

We are a group of economists using computational models in the pursuit of our research. By adopting sound software engineering practices, we hope to leverage tools from computational science and increase the transparency and extensibility of our implementations. In doing so, we expand the set of possible economic questions that we can address and improve the quality of our answers.

OpenSourceEconomics

Learn, build, share, repeat.

Bonn, Germany OpenSourceEconomics@policy-lab.org

Repositories 20 | People 19 | Teams 0 | Settings

Pinned repositories

Customize pinned repositories

respy
Python package for the simulation and estimation of a prototypical finite-horizon dynamic discrete choice model
Python ★ 15 ⑂ 11

grmpy
Python package for the simulation and estimation of generalized Roy model
Jupyter Notebook ★ 10 ⑂ 6

career_decisions_data
Dataset for the seminal paper on dynamic human capital investment by Keane & Wolpin (1997)
Jupyter Notebook ★ 1

Find a repository… Type: All Language: All New

respy
Python package for the simulation and estimation of a prototypical finite-horizon dynamic discrete choice model
economics software-engineering structural-microeconometrics
Python MIT ⑂ 11 ★ 15 ⓘ 39 ⇄ 1 Updated 15 minutes ago

ruspy
Python package for the replication of John Rust's 1987 paper on the optimal replacement of GMC bus engines
Jupyter Notebook MIT ⑂ 1 ★ 0 ⓘ 2 ⇄ 0 Updated 3 hours ago

norpy
Python package for the analysis of human capital investment decisions using Norwegian population panel data.
Python ⑂ 1 ★ 1 ⓘ 7 ⇄ 1 Updated 2 days ago

soepy

Top languages

Jupyter Notebook Python Scheme TeX Fortran

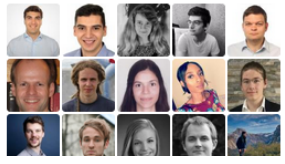
Most used topics

Manage

software-engineering behavioral-economics economics risk-preferences time-preferences

People

19 ›



Communication

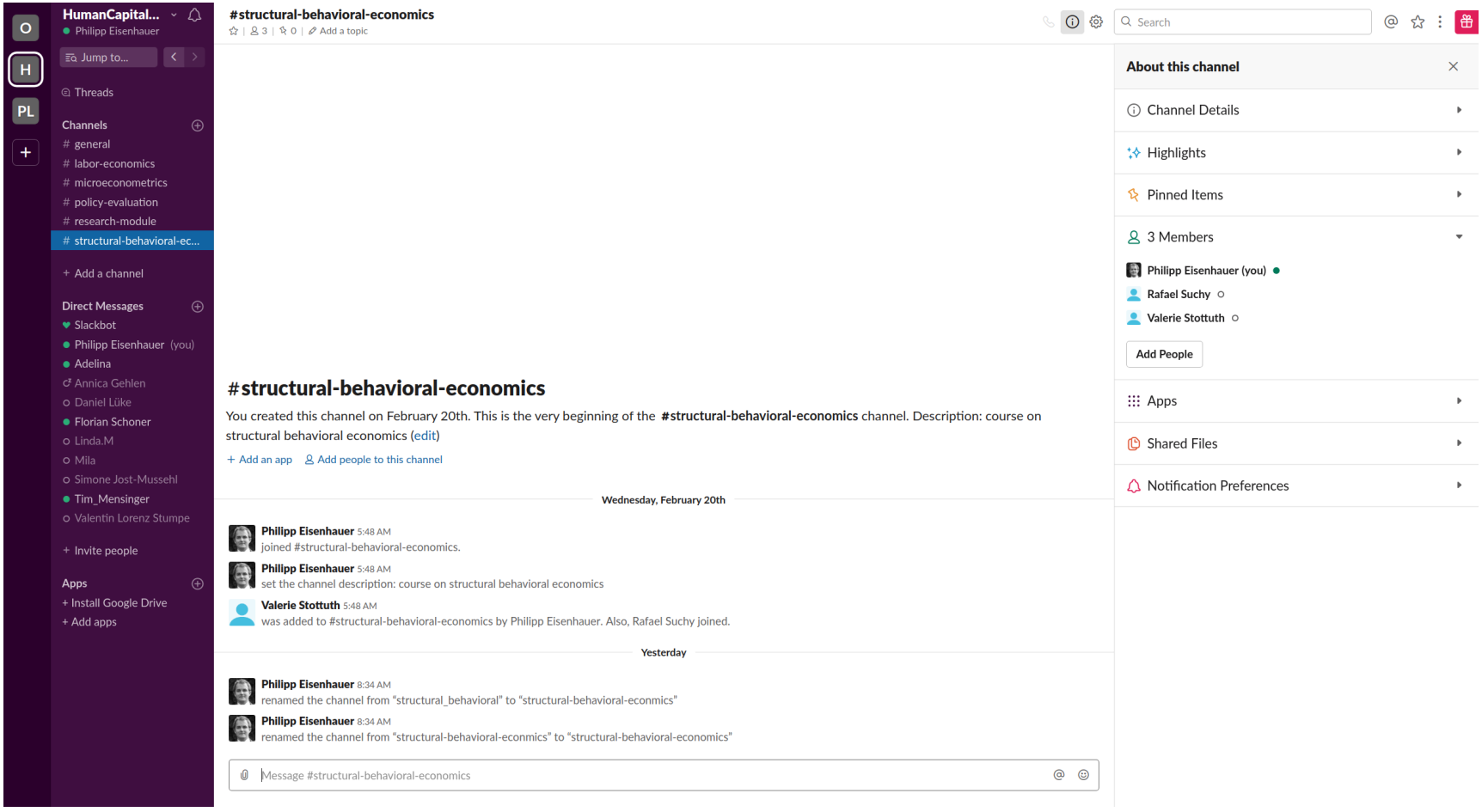
Slack http://bit.ly/human-capital-slack

http://bit.ly/ose-slack

GitHub http://bit.ly/human-capital-github

http://bit.ly/ose-github

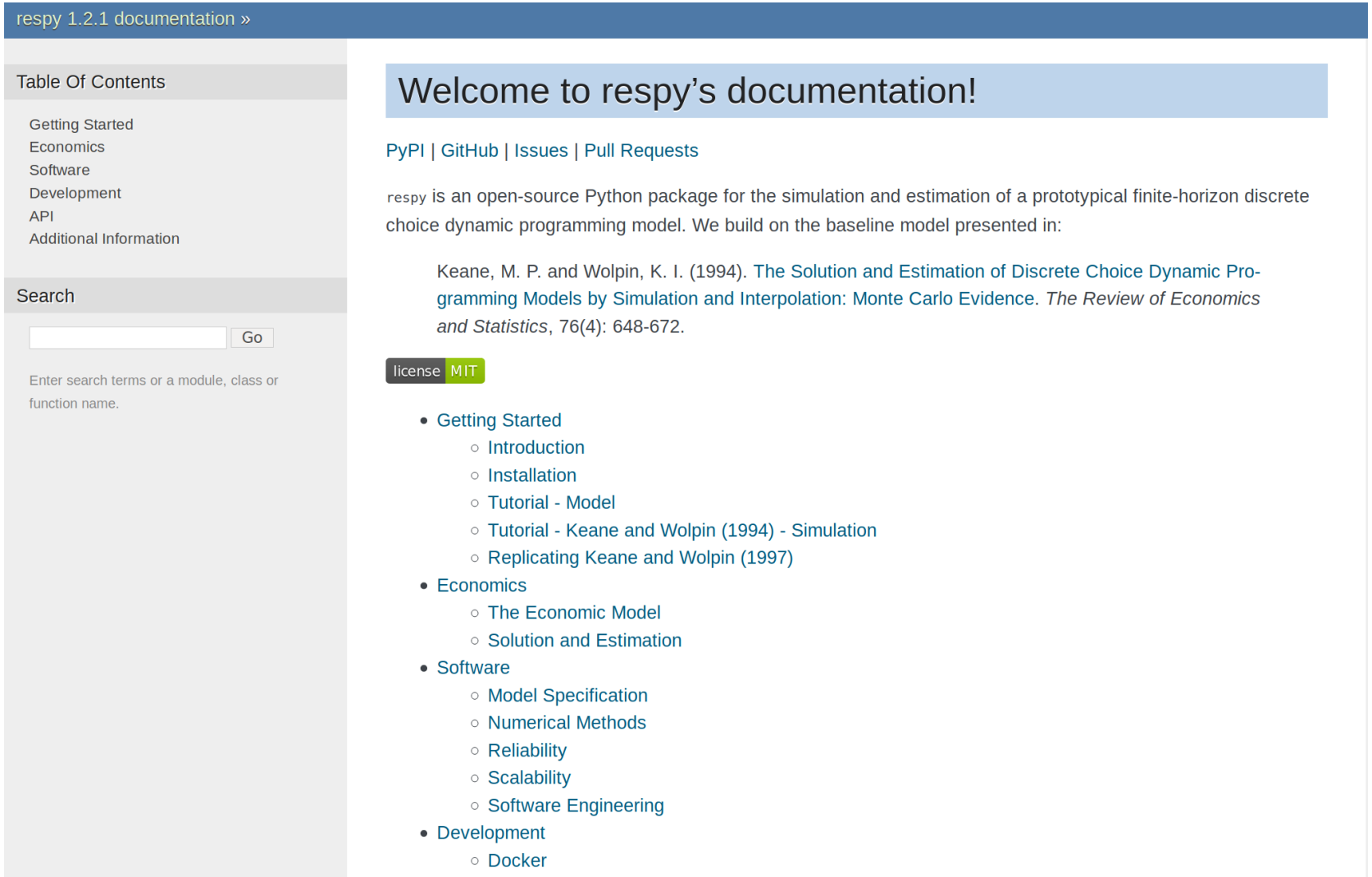
Figure: Communications



Common baseline

- Keane, M. P., & Wolpin, K. I. (1997). The career decisions of young men. *Journal of Political Economy*, *105*(3), 473–522.
- respy. (2018). *respy: An open-source package for the simulation and estimation of a canonical model of human capital investment.* Retrieved from http://doi.org/10.5281/zenodo.595547

Figure: Code documentation



respy 1.2.1 documentation »

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- Development
- API
- Additional Information

Search

Go

Enter search terms or a module, class or function name.

Welcome to respy's documentation!

PyPI | GitHub | Issues | Pull Requests

`respy` is an open-source Python package for the simulation and estimation of a prototypical finite-horizon discrete choice dynamic programming model. We build on the baseline model presented in:

> Keane, M. P. and Wolpin, K. I. (1994). The Solution and Estimation of Discrete Choice Dynamic Programming Models by Simulation and Interpolation: Monte Carlo Evidence. *The Review of Economics and Statistics*, 76(4): 648-672.

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- Getting Started
  - Introduction
  - Installation
  - Tutorial - Model
  - Tutorial - Keane and Wolpin (1994) - Simulation
  - Replicating Keane and Wolpin (1997)
- Economics
  - The Economic Model
  - Solution and Estimation
- Software
  - Model Specification
  - Numerical Methods
  - Reliability
  - Scalability
  - Software Engineering
- Development
  - Docker

Behavioral structural econometrics

- DellaVigna, S. (2018). Structural behavioral economics. In D. Bernheim, S. DellaVigna, & D. Laibson (Eds.), *Handbook of behavioral economics.* Elsevier.

Student project

Conclusion

Appendix

DellaVigna, S. (2018). Structural behavioral economics. In D. Bernheim, S. DellaVigna, & D. Laibson (Eds.), *Handbook of behavioral economics.* Elsevier.

Keane, M. P., & Wolpin, K. I. (1997). The career decisions of young men. *Journal of Political Economy*, *105*(3), 473–522.

Keshav, S. (2016). *How to read a paper.* Retrieved from http://blizzard.cs.uwaterloo.ca/keshav/home/Papers/data/07/paper-reading.pdf

Purugganan, M., & Hewitt, J. (2004). *How to read a scientific article.* Retrieved from http://www.owlnet.rice.edu/~cainproj/courses/HowToReadSciArticle.pdf

respy. (2018). *respy: An open-source package for the simulation and estimation of a canonical model of human capital investment.* Retrieved from http://doi.org/10.5281/zenodo.595547

University Libraries, University of Colorado Boulder. (2018). *Strategy: Notetaking & Reading.* Retrieved from http://libguides.colorado.edu/c.php?g=622592&p=4336669