

Curriculum Vitae

Mahdi Ebrahimi Kahou

Last Update: August 2024

PERSONAL INFORMATION

Citizenship: Canadian
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RESEARCH INTERESTS

Macroeconomics, Machine Learning, Econometrics, and Computational Economics.

EMPLOYMENT

-
- Assistant Professor of Economics, Bowdoin College 2023-

EDUCATION

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- Doctor of Philosophy in Economics, [University British Columbia](#). 2017-2023
Thesis: [Essays on theory and computation in economics](#)
 - Visiting scholar at Federal Reserve Bank of Minneapolis. October 2022
 - Doctor of Philosophy in Economics, [University of Minnesota](#).
Voluntary withdrawal due to the U.S. travel ban after finishing the first year.
 - Master of Science in Physics,
[Institute for Quantum Science and Technology](#), University of Calgary.
Thesis: [Spatial search via non-linear quantum walk](#)
 - Bachelor of Science in Physics, [Sharif University of Technology](#).

WORKING PAPERS

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- [“Exploiting Symmetry in High-Dimensional Dynamic Programming”](#), NBER Working Paper, 2021.
With Jesús Fernández-Villaverde, Jesse Perla, and Arnav Sood.
 - [“Spooky Boundaries at a Distance: Exploring Transversality and Stability with Deep Learning”](#).
With Jesús Fernández-Villaverde, Sebastian Gomez Cardona, Jesse Perla, and Jan Rosa.
 - [“Optimal Entry Decision with Correlated Variable Cost and Output Price”](#).
 - [“How Inductive Bias in Machine Learning Aligns with Optimality in Economic Dynamics”](#)
With James Yu, Jesse Perla, and Geoff Pleiss

WORK IN PROGRESS

- “Solving Equilibrium Economic Models with Deep Learning”.
With Jesús Fernández-Villaverde and Jesse Perla.

PUBLICATIONS

- “Quantum Search with Interacting Bose-Einstein Condensates”, Physical Review A, 2013. (With David L. Feder)
- “Macroprudential Policy: A Review”, Journal of Financial Stability, 2017. (With Alfred Lehar)

PRESENTATIONS AND INVITED TALKS

- **2024:** Toronto Metropolitan University, ACM (Economics and Computation, Yale), Southern Economic Association (Washington, DC), Conference on Frontiers in Machine Learning and Economics: Methods and Applications (Chicago Booth/Federal Reserve Philadelphia)
- **2023:** TeIAS, Econometric Society Summer School in Dynamic Structural Econometrics, University of Toronto, University of Calgary (Haskayne School of Business), Bowdoin College, Bates College, University of Waterloo, Western University, McGill, Bank of Canada, University of Missouri.
- **2022:** Society For Economic Dynamics (Madison), University of Minnesota, University of Colorado Boulder.
- **2012:** Canadian Association of Physicists (Calgary).

SCHOLARSHIPS, AWARDS AND HONOURS

- Selected for 71st Lindau Nobel Laureate Meeting on Economic Sciences.
- Social Sciences and Humanities Research Council (SSHRC) Doctoral Fellowship.
- Four Year Doctoral Fellowship (UBC).
- Faculty of Graduate Studies Award (University of Calgary).
- Institute for Quantum Science and Technology “Top-Up Students Award” (University of Calgary).
- Bronze medal in National Physics Olympiad.

TEACHING EXPERIENCE

Bowdoin College:

- Mathematical Economics. 2024
- Principles of Macroeconomics×2. 2023-2024
- Intermediate Macroeconomics. 2023-24

COMPUTER PROGRAMMING

- MATLAB, Mathematica, Julia, Python.

REFERENCES

- Dr. Jesse Perla
Associate Professor of Economics
University of British Columbia
6000 Iona Drive, Vancouver, BC Canada V6T 1L4.
Phone: +1 604 822-5721
E-mail: jesse.perla@ubc.ca.
- Dr. Jesús Fernández-Villaverde
Professor of Economics
University of Pennsylvania
The Ronald O. Perelman Center for Political Science and Economics
133 South 36th Street, Philadelphia, PA 19104.
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- Dr. Hiroyuki Kasahara
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