Adhen Benlahlou

Professional profile

I am an applied econometrician with a strong interest in structural econometrics, particularly in the context of the economics of science and innovation. My research combines microeconomic models with econometric network analysis to explore how networks influence the productivity of knowledge producers, such as inventors and academic researchers.

Research positions & work experience

October 2022- **Post-Doctoral researcher**, Chair for Economic Theory and Computational Economics and the Center for Uncertainty Studies, Bielefeld University, Germany

September **Temporary Teaching and Research Associate**, GATE Groupe d'Analyse et 2021-August de Théorie Economique Lyon St-Etienne (UMR 5824), Université Jean Monnet, 2022 IAE de Saint-Etienne, France

October **Phd Student**, GATE Groupe d'Analyse et de Théorie Economique Lyon St-2017-July 2022 Etienne (UMR 5824), Université Jean Monnet Saint-Etienne, France

Education

October Phd Student, GATE-LSE, Saint-Etienne, France

2017-July 2022 Peer effects in knowledge production.

Phd Advisors: Corinne Autant-Bernard and Pascal Billand

Phd Commitee: Francesco Lissoni (referee), Agnieszka Rusinowska (referee), James P.Lesage (Discussant), Sudipta Sarangi (Discussant)

Research interest: Economics of Innovation and Science , Economics of Networks, Applied Econometrics

2017 Master Economics and Finance (Public Policies Analysis), Université Jean Monnet, Saint-Etienne, Memoire:"Proximity Paradox and radical innovation, a puzzling link" (Dir. Corinne Autant-Bernard and Pascal Billand)., Saint-Etienne, France

2015 **BA in Economics**, *UJM*, Saint-Etienne, France

Job Market Paper

Job Market Benlahlou, A., Peer effects in Cancer research,

This paper develops a theory of scientific peer effects to study scientific productivity when authors care about the behavior of their coauthors. The theory predicts that an author's output increases in their Katz-Bonacich centrality, a standard measure of centrality in networks. I test the model's predictions using a detailed dataset of cancer researchers, showing that an author's position in the coauthorship network (measured by Katz-Bonacich centrality) is a key determinant of their productivity. After controlling for observable characteristics and unobservable network-specific factors, my results demonstrate the importance of peer effects not only from superstar scientists but from a broader range of collaborators. These findings highlight the relevance of network externalities in scientific productivity and provide empirical evidence for the critical role of network structure in fostering knowledge creation. By controlling for prestige-driven effects, my results suggest that peer effects are driven by scientific complementarities rather than status. Additionally, the Nash-Katz-Bonacich linkage offers strong policy implications, particularly for designing optimal network structures to maximize collective knowledge production.

Working papers

1/1

Balzer, M. and Benlahlou, A., Mitigating Consequences of Prestige in Citations of Publications

Benlahlou, A., On the origin of scientific peer effects, strategic complementarity or conformity?

Draft available upon request

Draft available Benlahlou, A., Peer effects among inventors, unpacking their origin.

Work in progress

Benlahlou, A. and Foerster, M., Risk Taking in Academia: Inferring Researchers' Attitudes from Publication Data

Balzer, M. and Benlahlou, A., Funding Cancer Research Networks: A Question of Prestige or Scientific Impact?

Benlahlou, A., Strategic Interactions in Science and Technology Networks: Substitutes or Complements?

Benlahlou, A. and Ferrières, S., Stability in team production game on bipartite networks.

Benlahlou, A. and Ferrières, S., Efficient network in team production game on bipartite networks.

Publications

Benlahlou, A., 2019., Team production game on bipartite networks. Economics Letters, 180, pp.94-98.

Teaching experiences

Master, Phd Reading group on Empirical Industrial Organisation, University Bielefeld, 2024-2025

Master, Phd Economics of Network, University Bielefeld, 2024-2025

Undergraduate Microeconomics tutorial (In french), University Jean-Monnet, 2020-2022

Undergraduate Introduction to microeconomics (In french), University Jean-Monnet, 2022, 36 heures

Undergraduate Introduction to microeconomics (In french), Telecom School Saint-Etienne, 2022, 18 heures

Undergraduate Economics of Innovation (In french), Telecom School Saint-Etienne, 2022, 18 hours

Master Economics of Network, Université Jean Monnet, Saint-Etienne, 2022-2024

Undergaduate International Economics (In french), University Jean-Monnet, 2022

Undergaduate Tutorials on International Economics (In french), University Jean-Monnet, 2022

Confences Talks

- 2022 6th Geography of Innovation Conference, July 4-6, Milan, Italy
- 2022 XVI World Conference of Spatial Econometrics Association, June 23-24, Warsaw, Poland
- 2021 NSF Network Science in Economics Conference, March 26-28, Chicago (Online) USA
- 2020 35th congress of the European Economic Association, August 24th-28th, Rotterdam (Online), Netherlands.
- 2019 59th ERSA Congress, 27th 30th August, Lyon, France

2019 International Conference on Public Economic Theory, 8th-11th, University of Strasbourg, France

Seminars and Workshop

- $2022\,$ 20th International Workshop in Spatial Econometrics and Statistics, 19-20 May , Lille, France
- 2021 Impact Workshop, 7 September, Grenoble, France
- 2019 6th Economics of Science and Innovation workshop, 10th 11th June, Barcelona, Spain
- 2019 ED SEG PhD workshop, 11th-12th April, Lyon, France

Professional Activities

2019 INDEPTH workshop co-organiser, 28th-29th March, Saint-Etienne, France Refereeing Journal of Economic Behavior & Organization

Skills

R Text Mining
Python Data Mining
MySql Network Analysis

Technical NodeJs Patents and Scientific publication

Skills Applied Econo-Unsupervised Learning

metrics

Bayesian Econometrics

Language French Fluent (Mother Tongue).
English Business competence

Honors, Scholarships, Fellowships, and Grants

- o Université de Lyon, école doctorale ED486 Fully funded Phd.(2017-2021)
- o Prize for the bester Master Dissertation 2016, M.A, Jean Monnet University of Saint-Etienne.
- o Cem Ertur Prize, 20th workshop in spatial econometrics, Lille, France (500 euros)

References

Pr C.Autant-Bernard, Department Head and Professor of Economics, University of Saint-Etienne, France

corinne.autant@univ-st-etienne.fr

Pr P.Billand, Associate Professor, University of Saint-Etienne, France billandpascal@gmail.com Pr H.Dawid, Professor of Economics, Chair for Economic Theory and Computational Economics, Bielefeld University, Germany hdawid@uni-bielefeld.de

Pr S.Sarangi, Department Head and Professor of Economics, Virginia Tech, Blacksburg, Virginia, USA ssarangi@vt.edu