Laurent R. Bergé

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Personal information:
French citizen, born December 21 1985, in Villeneuve-sur-Lot (France)

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Fields of interest: *Applied micro-economics ★ Economics of innovation ★ Network science ★ Statistics*

Current Position

2021   **Associate Professor of Economics (Maître de Conférénces)**
University of Bordeaux, GREThA, UMR CNRS 5113

Previous Positions

2016-2020   **Postdoctoral Researcher in Economics**
Department of Economics and Management, University of Luxembourg

2016   **Postdoctoral Researcher in Statistics**
MAP5 (UMR CNRS 8145), University Paris Descartes

2016   **External Research Fellow**
GREThA (UMR CNRS 5113), University of Bordeaux

Research Visits

Oct. 2013 -Jan. 2014   **Visiting Researcher in Residence**
London School of Economics, Department of Geography and Environment

Education

2015   **Ph.D. in Economics**, GREThA, University of Bordeaux
2010   **M.S. Economics & Statistics**, University Paris 1
2009   **M.S. Economics**, University of Bordeaux
2008   **B.A. Economics**, University of Bordeaux
2006   **B.S. Mathematics**, University of Bordeaux

Awards

2019   Department of Economics and Management Award for Young Researchers, University of Luxembourg
2018   Martin Beckmann Award (best paper published in *Papers in Regional Science* in 2017) for the article "Network proximity in the geography of research collaboration."

Publications

- Unintended triadic closure in social networks: The strategic formation of research collaborations between French inventors. w/ Nicolas Carayol, Lorenzo Cassi and Pascale Roux
  Journal of Economic Behavior and Organization, 169, 2019.

- The Latent Topic Block Model for the co-clustering of textual interaction data. w/ Charles Bouveyron, Marco Corneli and Pierre Latouche
  Computational Statistics and Data Analysis, 137, 2019.

- How do inventors networks affect urban invention? w/ Nicolas Carayol and Pascale Roux
  Regional Science and Urban Economics, 71, 2018.

- Bridging centrality as an indicator to measure the 'bridging role' of actors in networks: An application to the European nanotechnology co-publication network. w/ Thomas Scherngell and Iris Wanzenböck
  Journal of Informetrics, 11(4), 2017.

- Centrality of regions in R&D networks: A new measurement approach using the concept of bridging paths. w/ Thomas Scherngell and Iris Wanzenböck
  Regional Studies, 51(8), 2017.

- Network proximity in the geography of research collaboration.
  Papers in Regional Science, 96(4), 2017.
  Beckmann Award 2018 (Best PiRS paper of 2017)

- HDclassif: An R package for model-based clustering and discriminant analysis of high-dimensional data. w/ Charles Bouveyron and Stéphane Girard
  Journal of Statistical Software, 46(6), 2012.

Book Chapters

- Bridging centrality: A new indicator for the positioning of actors in complex networks. w/ Thomas Scherngell and Iris Wanzenböck
  In Weber (ed.): *Innovation Complexity and Policy. Contributions from 30 years of innovation policy research in Austria,* pp. 85-100, Peter Lang, Frankfurt am Main [ISBN 978-3-631-72315-9], 2017.

Refereed Conference Proceedings

- Software patents and scientific publications. w/ Thorsten Doherr and Katrin Hussinger
  Best Paper Proceedings of the Academy of Management 2017, n°13779, 2017.

Working Papers

- Efficient estimation of maximum likelihood models with multiple fixed-effects: the R package FENmlm
  CREA Discussion papers, 13, 2018

- How do patent rights affect university science? w/ Thorsten Doherr and Katrin Hussinger
  R&R

- An efficient algorithm to estimate maximum likelihood models with multiple fixed-effects
  Submitted

Work in Progress

· "How access to knowledge shapes innovation: The case of the ARPANET", w/ Christian Fons-Rosen and Myra Mohnen

· "The consequences of involuntary job mobility in the context of innovation: A case study of Nortel", w/ Nicolas Jonard and Ruth Samson

Patents

· "Method for co-clustering senders and receivers based on text or image data files." w/ Charles Bouveyron, Marco Corneli and Pierre Latouche
European Patent Office, filed 2018, EP18305896.5. PCT PCTEP2019/068011.

Ph.D. Supervision

2019-...   Ruth Samson, on *Job Mobility and Innovation.* Jointly supervised with Nicolas Jonard.

Grants

2020   France Stratégie, "Retombées du déploiement du très haut débit sur les entreprises: Quels effets sur les usages numériques, l'innovation, et la performance ?" (Evaluating the economic impact of ultra-fast broadband deployment in France) w/ Chloé Duvivier and Florian Léon [91,000€]

Communications

2019 3rd Luxembourg Workshop on Innovation, Luxembourg ‖ 12th Annual Northwestern/USPTO Conference on Innovation Economics, Chicago, USA ‖ University Paris Dauphine, Governance Analytics seminars, Paris, France

2018 2nd Luxembourg Workshop on Innovation, Luxembourg ‖ 13th European Policy for Intellectual Property conference, Berlin, Germany ‖ 4th Geography of Innovation Conference, Barcelona, Spain

2017   GREThA seminars, Bordeaux, France ‖ BETA seminars, Strasbourg, France ‖ 12th European Policy for Intellectual Property conference, Bordeaux, France‖ 77th Academy of Management conference, Atlanta, USA ‖ $54^{ème}$ colloque de l'ASRDLF, Athens, Greece ‖ 7th ZEW/MaCCI Conference on the Economics of Innovation and Patenting, Mannheim, Germany ‖ 1st Luxembourg workshop on Innovation, Luxembourg ‖ RSA annual conference, Dublin, Ireland

2016 3rd Geography of Innovation Conference, Toulouse ‖ $33^{èmes}$ journées de la microéconomie appliquée, Besançon ‖ Journée R, Muséum National D'Histoire Naturelle, Paris ‖ 56th congress of the European Regional Science Association, Vienna, Austria ‖ Barcelona workshop on regional an urban economics, Barcelona, Spain

2012-2015   NetWorkshop, Pécs, Hungary ‖ 55th congress of the European Regional Science Association, Lisbon, Portugal ‖ Econ-Geo seminars, University of Utrecht, Utrecht, The Netherlands ‖ 54th congress of the European Regional Science Association, Saint-Petersburg, Russia (×2 presentations) ‖ 53rd congress of the European Regional Science Association, Palermo, Italy ‖ Economic Geography seminars, London School of Economics, London, England ‖ $22^{ème}$ Séminaire Européen des Doctorants en Économie Régionale, Bordeaux

Refereeing Activities

Regional Studies (×2), Industry and Innovation (×4), Science and Public Policy, PLoS One, Scientometrics (×4), Tijdschrift voor economische en sociale geografie, Journal of Economics & Management Strategy.

Academic Responsibilities

2018-...	Appointed member of the CREA council (postdoc representative), University of Luxembourg
2013-2015	Elected member of the scientific board of the laboratory GREThA, University of Bordeaux.

Organization

2017-2019	Co-organizer of the 1st, 2nd and 3rd Luxembourg workshops on Innovation
2013-2014	Organizer of the first economics Ph.D. lunch seminars – GREThA, University of Bordeaux

Teaching Experience

2018, 2019	**Introduction to R programming** (PhD level, University of Luxembourg) [Lecture, 2×15 hours]
2017, 2018	**Economics and management of innovation** (Undergraduate, University of Luxembourg) [TA, 2×15 hours]
2014, 2015	**Econometrics: Times series** (Undergraduate, University of Bordeaux) [TA, 5×15 hours]
2014, 2015	**Macro-economics** (Undergraduate, University of Bordeaux) [TA, 7×15 hours]
2014	**Econometrics: Analysis of financial times series** (Graduate, University of Bordeaux) [TA, 6 hours]
2012	**SAS programming for data management** (Graduate, University of Bordeaux) [TA, 15 hours]
2011	**Network simulation games** (Graduate, University of Bordeaux) [Lecture, 2 hours]
2010, 2011	**Micro-economics** (Undergraduate, University of Bordeaux) [TA, 4×15 hours]
2010, 2011	**Theory of the firm** (Undergraduate, University of Bordeaux) [TA, 4×15 hours]
2010	**Informatics: C language for mathematics** (Undergraduate, University Paris 1) [TA, 15 hours]

Software Products, *R* Packages

Over 150,000 downloads as of November 2020.

- **fixest** Fast and user-friendly estimation of econometric models with multiple fixed-effects.
  Orders of magnitude faster than existing methods (see benchmark).

- **fplot** Easiest way to plot graphs of regular/conditional/weighted distributions.

- **hdd** Class of data allowing the easy manipulation of out of memory data sets.

- **dreamerr** Tools to make error-handling a piece of cake.

- **HDclassif** Tools to create coherent groups of observations based on observables (clustering).

References

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