Angelo Mele

CONTACT Information Johns Hopkins University Carey Business School 100 International Dr. Baltimore, MD 21202 Cell: (646) 327-7861
Work: (410) 234-9435
E-mail: angelo.mele@jhu.edu
Web: http://meleangelo.github.io
Github: https://github.com/meleangelo

CURRENT APPOINTMENTS Associate Professor of Economics (without tenure), Johns Hopkins University, Carey

Business School, Aug 2018-Present

Scientific Core, Hopkins Population Center, May 2021-present Affiliate, Hopkins Population Center, May 2017-present

Affiliate Member, Institute for Data-Intensive Engineering and Science (IDIES) at Johns

Hopkins, December 2017-present

Previous Appointments Assistant Professor, Johns Hopkins University, Carey Business School, Aug~2011-Aug

EDUCATION

University of Illinois at Urbana-Champaign, Champaign, IL USA

Ph.D., Economics, December 2011

New York University, New York City, NY USA

M.A., Economics, May 2005

Bocconi University, Milan, Italy

B.A., Economics (Summa cum Laude), February 2002

RESEARCH INTERESTS Fields: Applied Econometrics, Labor Economics, Applied Microeconomics Topics: Econometrics of network models, Economics of social interactions, Racial Seg-

regation and Homophily, Computational Methods, Experiments in Networks

Publications

- 1. A Structural Model of Homophily and Clustering in Social Networks (June 2022), Journal of Business and Economic Statistics, vol. 40, issue 3, pages 1377-1389
- 2. Spectral estimation for large stochastic blockmodels with nodal covariates (May 2022), Conditionally accepted at Journal of Business and Economic Statistics
- 3. On spectral algorithms for community detection in stochastic blockmodel graphs with vertex covariates (May 2022) (with Cong Mu, Lingxin Hao, Joshua Cape, Avanti Athreya, Carey Priebe), forthcoming, Transactions of Network Science and Engineering
- 4. Approximate Variational Estimation for a Model of Network Formation (May 2020) (with Lingjiong Zhu) forthcoming, Review of Economics and Statistics
- 5. Does School Desegregation Promote Diverse Interactions? An Equilibrium Model of Segregation within Schools, *American Economic Journal: Economic Policy*, vol. 12, issue 2, pages 228-257
- 6. A Structural Model of Dense Network Formation, (May 2017), *Econometrica*, vol. 85, issue 3, pages 825-850

- 7. Viral Altruism? Charitable Giving and Social Contagion in On-Line Networks (March 2016) (with Nicola Lacetera and Mario Macis), Sociological Science
- 8. Structural Models of Complementary Choices (May 2014), Marketing Letters, 25, 3, pp: 245-256 Springer (with Steve Berry, Ahmed Khwaja, Vineet Kumar, Andres Musalem, Kenneth C. Wilbur, Greg Allenby, Bharat Anand, Pradeep Chintagunta, W. Michael Hanemann, Przemek Jeziorski)
- 9. Poisson Indices of Segregation (January 2013), Regional Science and Urban Economics, 2013, vol. 43, issue 1, pages 65-85

WORKING PAPERS, SUBMITTED, REVISED

- 1. Latent Communities in Employment Relations and Wage Distributions: A Network Approach (August 2022) (with Lingxin Hao, Avanti Athreya, Joshua Cape, Cong Mu and Carey Priebe), submitted
- 2. A model of inter-organizational network formation (December 2021) (with Shweta Gaonkar), *submitted*
- 3. A structural model of business card exchange networks (August 2021) (with Juan Nelson Martinez Dahbura, Takanori Nishida and Shota Komatsu)
- 4. A structural model of firm collaborations with unobserved heterogeneity (2021) (with Shweta Gaonkar and Michael Schweinberger)
- 5. Creativity and Market Success: Evidence from the movie industry (2020) (with Shweta Gaonkar), Reject and Resubmit at Strategic Entrepreneurship Journal

WORK IN PROGRESS

- 1. Spectral estimation of a dynamic network formation model (2022) (with Avanti Athreya, Joshua Cape, Cong Mu, Lingxing Hao and Carey Priebe)
- 2. A variational exchange algorithm for Bayesian estimation of ERGM models
- 3. Microeconomic foundations of a latent position network model
- 4. Scalable two-step algorithms for estimation of large network models
- 5. Network (video)games (with Micah Pollak and Phil Solimine)

INACTIVE WORKING PAPERS

Approximate Variational Inference for a Model of Social Interactions (December 2016)

Racial Segregation and Public School Expenditure (with Eliana La Ferrara)

Who's Afraid of the Big Bad Wolf? Do Pedophiles live close to schools? (September 2010)

Software

lighthergm: an R package for scalable estimation of Hierarchical ERGMs

grdpg: an R package for estimation of generalized random dot product graphs with nodal covariates

mfergm: an R package for variational approximations of (some) ergms

netnew: R replication package for Mele (2017)

segnet: R replication package for "Does School Desegregation Promote Diverse Interactions? An Equilibrium Model of Segregation Within Schools"

Grants

- Advanced Research Computing Support, Johns Hopkins Carey Business School, \$5000
- NSF Grant SES #1951005, \$550,000, with Lingxin Hao, Joshua Cape and Carey Priebe
- Supplemental RA support 2020, Johns Hopkins Carey Business School, \$3000
- Teaching Innovation Award 2019, Johns Hopkins Carey Business School, \$2500
- NET Institute Summer Grant 2018 (with Shweta Gaonkar), \$3000
- IDIES Seed Grant, Johns Hopkins Institute for Data-Intensive Engineering and Science (with Lingxin Hao and Gerard Lemson) \$25000
- Black and Decker Research Grant 2017, Johns Hopkins Carey Business School (with Shweta Gaonkar) \$2500
- Internal grant 2016, Johns Hopkins Carey Business School (with Shweta Gaonkar) \$3000
- NET Institute Summer Grant 2013, \$3000, Net Institute, NYU Stern
- NET Institute Summer Grant 2012, \$7500, Net Institute, NYU Stern (with Nicola Lacetera and Mario Macis)
- NIH Travel Grants, Add Health conference 2010
- NET Institute Summer Grant 2010-2011, \$3000, Net Institute, NYU Stern
- R. W. Harbeson Dissertation Grant 2009-2011, UIUC, \$2000
- Robert Ferber Award 2008-2009, UIUC, \$3000
- Conference Travel Grants, UIUC, 2006-2010.

Honors and Awards

- R. W. Harbeson Dissertation Fellowship, 2009-2011, UIUC
- E.B. McNatt Award for Research in Labor Economics, 2008-2009, UIUC
- Young Spatial Econometrician Award 2008, Spatial Econometrics Association
- Paul E. Boltz Fellowship, 2008-2009, UIUC
- Hans Brems Award (Best Graduate Research Paper), 2007 and 2008, UIUC
- List of Teachers ranked as Excellent by the students, Fall 2007, Spring 2008, UIUC
- Summer Research Award, 2007, UIUC
- Mac Cracken Scholarship, New York University, 2003-2005
- Marco Fanno Scholarship, Associazione Marco Fanno MedioCredito Centrale Bank, 2003-2004
- Premio di laurea Roberto Franceschi, for the best honor thesis on social exclusion, poverty at the national and international level, Associazione Roberto Franceschi, 2003
- Teaching fellowship at Bocconi University for Microeconomics (undergraduate) and Development Economics (advanced undergraduate), Sept 2002-Aug 2003
- Gold medal, Bocconi University, 2002
- Summa cum laude, Bocconi University, 2002

Presentations

AND

Bocconi University (Milan, Italy)

CONFERENCES (INCLUDING SCHEDULED)

 $\label{thm:eq:american Economic Association Annual Meeting (New Orleans, LA) (invited)} American Economic Association Annual Meeting (New Orleans, LA) (invited)$

Barcelona Summer Forum - Networks (Barcelona, Spain)

Network Economics: Applications and Challenges (virtual)

125th Anniversary of the Department of Economics, University of Illinois at Urbana-Champaign (Champaign, IL)

Network Science in Economics 2022, University of Chicago (Chicago, IL)

2021

2023

European Winter Meeting of the Econometrics Society (virtual)

Southern Economics Association Annual Meeting (Houston, TX) (invited, hybrid) Econometrics Seminar, University of Pennsylvania Economics (Philadelphia, PA)

Network Science in Economics 2021, University of Chicago (Chicago, IL) (virtual)

2020

Econometrics Seminar, University of Southern California (virtual)

Economics Seminar, West Virginia University (virtual)

Econometric Society World Congress (virtual)

2019

CMStatistics 2019 (London UK, invited)

Network Econometrics Juniors' Conference 2019, Northwestern University (Evanston, IL, invited)

Econometrics Seminar, University of Colorado Boulder (Boulder, CO)

Econometrics Seminar, Cornell University (Ithaca, NY)

Network Science in Economics 2019, Indiana University (Bloomington, IN)

Econometrics Seminar, Singapore Management University (Singapore)

Econometrics Seminar, Chinese University of Hong Kong (Hong Kong)

Sao Paulo School Economics (Brasil)

2018

Econometric Society Winter Meeting (Philadelphia, PA)

Econometrics Seminar, London School of Economics (London, UK)

Network Science in Economics Conference (Nashville, TN)

Mathematics Seminar, Florida State University (Tallahassee, FL)

Society of Labor Economists (SOLE) Annual meeting (Toronto, Canada)

North American Summer Meeting of the Econometric Society 2018 (UC Davis, CA)

International Association of Applied Econometics (IAAE) Annual Conference (Montreal, Canada)

2018 International Conference on Computational Social Science (Evanston, IL)

NBER Summer Institute 2018 - Labor Studies (Cambridge, MA)

Annual Meeting of the Academy of Management (Chicago, IL)

Econometrics Seminar, Catholic University of America (Washington DC)

Econometrics Seminar, Northwestern University (Evanston, IL)

Southern Economics Association Annual Meeting 2018 (Washington, DC)

2017

University of Southern California - Economics (Los Angeles, CA)

UIUC Econometrics Alumni Conference 2017 (Urbana, IL)

North American Regional Social Networks (NASN) Conference of the International Network for Social Network Analysis (INSNA) 2017 (Washington, DC)

2016

Conference on Econometrics and Statistics of Networks (Berkeley, CA)

Boston University - Economics Dept. (Boston, MA)

2015

AEA Annual Meeting 2015 (Boston, MA)

UIUC Econometrics Alumni Conference 2015 (Urbana, IL)

ACM Conference - Workshop on Social and Information networks (Portland, OR)

UC Berkeley - Economics Dept. (Berkeley, CA)

2014

AEA Annual Meeting 2014 (Philadelphia, PA)

Universite' de Laval (Quebec City, Canada)

University of Chicago (Chicago, IL)

University of Cagliari (Cagliari, Italy)

University of Sassari (Sassari, Italy)

2013

Choice Symposium 2013 (Noordwijk, The Netherlands)

University of Surrey (UK)

Conference on Bayesian Methods in Microeconometric Modeling (Caltech, CA)

Midwest Econometrics Group Annual Meeting (Indiana University, Bloomington IN)

Southern Economic Association Annual Meeting 2013 (Tampa, FL)

2012

UECE 2012 (Lisbon, Portugal)

Indiana University (Bloomington, IN)

Info-Metrics Conference on Econometrics of Networks (Washington, DC)

University of Maryland - Smith School of Business (College Park, MD)

North American Winter Meeting of the Econometric Society 2012 (Chicago, IL)

2011

INFORMS Annual Meeting 2011 (Charlotte, NC)

Conference on Networks in Cambridge (Cambridge, UK)

Public Economic Theory Meeting 2011 (Bloomington, IN)

SBIES 2011 (St. Louis, MO)

Univ. of Notre Dame (South Bend, IN)

Univ. of Pennsylvania (Philadelphia, PA)

Johns Hopkins University - Carey Business School (Baltimore, MD)

Southern Methodist University (Dallas, TX)

Federal Reserve Board (Washington, DC)

Univ. du Quebec a Montreal (Montreal, Canada)

2010

NET Institute Conference (New York, NY)

Labor Economics Seminar UIUC (Urbana, IL)

Midwest Econometrics Group Meeting (St. Louis, MO)

Add Health Users Conference (Bethesda, MD)

SED Meeting (Montreal, Canada)

Behavioral and Quantitative Game Theory: Conference on Future Directions (Newport Beach, CA)

Midwest Graduate Student Summit on Regional, Population and Health Economics (West-Lafayette, IN)

2009

Washington University Graduate Students Conference (St. Louis, MO)

Econometric Society European Meeting (Barcelona, Spain)

2008

Spatial Econometrics Association Conference (New York, NY)

Econometric Society Summer Meeting (Pittsburgh, PA)

SOLE Conference (New York, NY)

Midwest Economic Association Conference (Chicago, IL)

2007

Econometrics Lunch Seminar UIUC (Urbana, IL)

Labor Lunch Seminar UIUC (Urbana, IL)

European Economic Association Conference (Budapest, Hungary)

La Pietra-Villa Mondragone Workshop 2007 (Florence, Italy)

European Society of Population Economics Conference (Chicago, IL)

Econometrics Lunch Seminar UIUC (Urbana, IL)

2006

Washington University Graduate Student Conference (St. Louis, MO)

Teaching

Johns Hopkins University, Carey Business School

<u>Master in Finance</u>: Nonlinear Econometrics, Spring 2020, Spring 2021, Spring 2022, Spring 2023

Master in Finance: Statistical Analysis, Fall 2018

 $\underline{Global~MBA}$: Quantitative Methods, Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018

Master in Finance: Economics for Decision Making, Fall 2014

Global MBA: Networked Organizations, Spring 2012, Spring 2013, Spring 2014, Fall 2015, Fall 2016, Fall 2017

<u>Executive MBA</u>: Networked Organizations, Summer 2012, Summer 2013, Summer 2014, Summer 2015

University of Illinois at Urbana-Champaign

Graduate: Teaching Assistant, Microeconomic Theory, Fall 2009 and 2010

<u>Undergraduate</u>: Teaching Assistant for Principles of Microeconomics, Business Statis-

tics, Intermediate Microeconomic Theory, Labor Economics

New York University

Teaching Assistant for Principles of Microeconomics 2004

Bocconi University

Teaching assistant for Microeconomics and Development Economics 2002-2003

SHORT COURSES Johns Hopkins University, Department of Sociology

Guest Lecture, Computational Social Science, March 11, 2019

Universita di Cagliari, Department of Economics Social and Economic Networks, July 10-13, 2017

Conferences Organized Network Economics: Applications and Challenges (sponsored by Sansan, Inc.), (virtual mini-conference)

REFEREE ACTIVITY Journal of Political Economy, Quarterly Journal of Economics, Econometrica, Review of Economic Studies, Theoretical Economics, Journal of Business and Economics Statistics, Journal of Econometrics, Econometric Theory, The Review of Economics and Statistics, Journal of Applied Econometrics, Journal of Human Capital, International Economic Review, Quantitative Economics, Economics Letters, Journal of Economic Theory, European Economic Review, Southern Economic Journal, Regional Science and Urban Economics, Economic Inquiry, Economics of Governance, Journal of Statistical Software, American Journal of Preventive Medicine, Review of Income and Wealth, Marketing Letters, Statistical Methods and Applications, Games

SERVICE

Member of Scientific Committee for the Eighth Annual Conference of the International Association for Applied Econometrics, London June 2022

Member of the hiring committee, Post-doc in Applied Microeconomics, Johns Hopkins Carey Business School

Member of the Re-entry committe, Johns Hopkins Carey Business School

Member of Scientific Committee for the Eighth Annual Conference of the International Association for Applied Econometrics, (virtual) Rotterdam, Netherlands, June 2021 Member of Scientific Committee for the Sixth Annual Conference of the International

Association for Applied Econometrics, London June 2020

Admission committee GMBA program, Johns Hopkins Carey Business School

Member of Scientific Committee for the Fifth Annual Conference of the International Association for Applied Econometrics, Cyprus June 2019

Member of Scientific Committee for the Fourth Annual Conference of the International Association for Applied Econometrics, Montreal Canada June 2018

Coordinator of the Research Seminar Series, Johns Hopkins Carey Business School, 2016-2019

Admission Committee Global MBA (member), Johns Hopkins Carey Business School, 2018-2019

Member of Scientific Committee for the Fourth Annual Conference of the International Association for Applied Econometrics, Sapporo Japan June 2017

Member of Scientific Committee for the Third Annual Conference of the International Association for Applied Econometrics, Milan June 2016

Hiring Committe, Real Estate, Johns Hopkins Carey Business School 2015-2016
Hiring Committee, Economics, Johns Hopkins Carey Business School 2015-2016
Co-organizer of the Boneyard 2015 Econometrics Alumni Conference at UIUC, 2015
Coordinator for Economics/Network of Carey Research Seminars, 2013-2016
Coordinator for the Quantitative Econ Working Group, Johns Hopkins Carey Business School, 2014- present

Admission Committee (member), Johns Hopkins Carey Business School, 2012-2014 Hiring Committee (member), Johns Hopkins Carey Business School, 2012-present Dean Research Scholars Fellowship committee, Johns Hopkins Carey Business School GMBA Admitted Students Mock class, 2012, 2013, 2014

Ad Hoc reviewer, Palgrave Macmillan, 2013

Ad Hoc reviewer, NSF, 2014

PhD committees

James Lake, JHU Economics, 2012 (ext. member)
Brian Phelan, JHU Economics, 2013 (ext. member)
Matthew White, JHU Economics, 2014 (ext. member)
Mikhail Smirnov, JHU Economics, 2016 (ext. member)
Shaiza Qayyum, JHU Economics, 2018 (ext. member)
Sung Ah Bahk, JHU Economics, 2020 (ext. member)
Ryutah Kato, JHU Economics, 2020 (ext. member)

Programming Skills R, Stata, Parallel Programming (MPI, MPICH), Fortran 90, Matlab, C (basic), UNIX, Latex, HTML, ArcGIS (basic), Condor Environment

LANGUAGES Italian (native), English (fluent), French (basic)