

# Angelo Mele

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CONTACT INFORMATION	<p><b>Johns Hopkins University</b>  <b>Carey Business School</b>          100 International Dr.          Baltimore, MD 21202</p>	<p><i>Cell:</i> (646) 327-7861  <i>Work:</i> (410) 234-9435  <i>E-mail:</i> <a href="mailto:angelo.mele@jhu.edu">angelo.mele@jhu.edu</a>  <i>Web:</i> <a href="http://meleangelo.github.io">http://meleangelo.github.io</a>  <i>Github:</i> <a href="https://github.com/meleangelo">https://github.com/meleangelo</a></p>
CURRENT APPOINTMENTS	<p>Associate Professor of Economics (<i>without tenure</i>), Johns Hopkins University, Carey Business School, <i>Aug 2018-Present</i>          Scientific Core, Hopkins Population Center, <i>May 2021-present</i>          Affiliate, Hopkins Population Center, <i>May 2017-present</i>          Affiliate Member, Institute for Data-Intensive Engineering and Science (IDIES) at Johns Hopkins, December <i>2017-present</i></p>	
PREVIOUS APPOINTMENTS	<p>Assistant Professor, Johns Hopkins University, Carey Business School, <i>Aug 2011-Aug 2018</i></p>	
EDUCATION	<p><b>University of Illinois at Urbana-Champaign</b>, Champaign, IL USA          Ph.D., <b>Economics</b>, December 2011  <b>New York University</b>, New York City, NY USA          M.A., <b>Economics</b>, May 2005  <b>Bocconi University</b>, Milan, Italy          B.A., <b>Economics</b> (Summa cum Laude), February 2002</p>	
RESEARCH INTERESTS	<p><i>Fields:</i> Applied Econometrics, Labor Economics, Applied Microeconomics  <i>Topics:</i> Econometrics of network models, Economics of social interactions, Racial Segregation and Homophily, Computational Methods, Experiments in Networks</p>	
PUBLICATIONS	<ol style="list-style-type: none"> <li>1. Homophily and Community Structure at Scale: An Application to a Large Professional Network (May 2023) with Juan Nelson Martinez Dahbura, Shota Komatsu, and Takanori Nishida, <i>AEA Papers and Proceedings 2023</i></li> <li>2. Approximate Variational Estimation for a Model of Network Formation (with Lingjiong Zhu) <i>January 2023, The Review of Economics and Statistics</i>, vol. 105, no 1, pages 113-124</li> <li>3. Spectral estimation for large stochastic blockmodels with nodal covariates (October 2022), (with Lingxin Hao, Joshua Cape, Carey Priebe) (<i>forthcoming</i>), <i>Journal of Business and Economic Statistics</i></li> <li>4. A Structural Model of Homophily and Clustering in Social Networks (June 2022), <i>Journal of Business and Economic Statistics</i>, vol. 40, issue 3, pages 1377-1389</li> <li>5. 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), <i>Transactions of Network Science and Engineering</i>, vol. 9, no 5, pages 3373-3384,</li> </ol>	

6. Does School Desegregation Promote Diverse Interactions? An Equilibrium Model of Segregation within Schools (May 2020), *American Economic Journal: Economic Policy*, vol. 12, issue 2, pages 228-257
7. A Structural Model of Dense Network Formation, (May 2017), *Econometrica*, vol. 85, issue 3, pages 825-850
8. Viral Altruism? Charitable Giving and Social Contagion in On-Line Networks (March 2016) (with Nicola Lacetera and Mario Macis), *Sociological Science*
9. 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)
10. Poisson Indices of Segregation (January 2013), *Regional Science and Urban Economics*, 2013, vol. 43, issue 1, pages 65-85

WORKING PAPERS,  
SUBMITTED,  
REVISED

1. A Strategic Model of Software Dependency Networks (January 2023), (with Co-Pierre Georg)
2. 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*
3. A model of inter-organizational network formation (January 2023) (with Shweta Gaonkar), *resubmitted to Journal of Economic Behavior and Organization*
4. A structural model of business card exchange networks (August 2021) (with Juan Nelson Martinez Dahbura, Takanori Nishida and Shota Komatsu)
5. A structural model of firm collaborations with unobserved heterogeneity (2021) (with Shweta Gaonkar and Michael Schweinberger)
6. 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

**dinnet**: an R package for spectral estimation of dynamic networks models

**lighthergm**: an R package for scalable estimation of Hierarchical ERGMs

**grdp**: 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

- IDIES Seed Grant, Johns Hopkins Institute for Data-Intensive Engineering and Science (with Co-Pierre Georg) \$25000
- Advanced Research Computing Support, Johns Hopkins Carey Business School 2022-2023, \$5000
- NSF Grant SES #1951005 (2020-2023), \$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

INVITED SEMINARS **2023**

(INCLUDING  
SCHEDULED)

University of Pennsylvania (Philadelphia, PA)

Bocconi University (Milan, Italy)

**2021**

University of Pennsylvania (Philadelphia, PA)

**2020**

University of Southern California

West Virginia University

**2019**

University of Colorado Boulder (Boulder, CO)

Cornell University (Ithaca, NY)

Singapore Management University (Singapore)

Chinese University of Hong Kong (Hong Kong)

Sao Paulo School Economics (Brasil)

Inspira, Sao Paulo (Brasil)

**2018**

London School of Economics (London, UK)

Florida State University (Tallahassee, FL)

Catholic University of America (Washington DC)

Northwestern University (Evanston, IL)

**2017**

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

**2016**

Boston University - Economics Dept. (Boston, MA)

**2015**

UC Berkeley - Economics Dept. (Berkeley, CA)

**2014**

Universite' de Laval (Quebec City, Canada)

University of Chicago (Chicago, IL)

University of Cagliari (Cagliari, Italy)

University of Sassari (Sassari, Italy)

**2013**

University of Surrey (UK)

**2012**

Indiana University (Bloomington, IN)

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

**2011**

University of Notre Dame (South Bend, IN)

University 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**

Labor Economics Seminar UIUC (Urbana, IL)

**2007**

Econometrics Lunch Seminar UIUC (Urbana, IL)

Labor Lunch Seminar UIUC (Urbana, IL)

CONFERENCES

(INCLUDING  
SCHEDULED)

**2023**

Southern Economics Association Annual Meeting 2023 (New Orleans, LA)

Conference on Labor Economics, Universite' de Laval (Laval, Canada)  
 Network Science in Economics 2023, Virginia Tech (Blacksburg, VA)  
 6th International Conference on Econometrics and Statistics - EcoSta 2023 (Tokyo, Japan)  
 American Economic Association Annual Meeting (New Orleans, LA)  
**2022**  
 Barcelona Summer Forum - Networks (Barcelona, Spain)  
 Network Economics: Applications and Challenges  
 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**  
 European Winter Meeting of the Econometrics Society  
 Southern Economics Association Annual Meeting (Houston, TX)  
 Network Science in Economics 2021, University of Chicago (Chicago, IL)  
**2020**  
 Econometric Society World Congress  
**2019**  
 CMStatistics 2019 (London UK)  
 Network Econometrics Juniors' Conference 2019, Northwestern University (Evanston, IL, invited)  
 Network Science in Economics 2019, Indiana University (Bloomington, IN)  
**2018**  
 Econometric Society Winter Meeting (Philadelphia, PA)  
 Network Science in Economics Conference (Nashville, TN)  
 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 Econometrics (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)  
 Southern Economics Association Annual Meeting 2018 (Washington, DC)  
**2017**  
 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)  
**2015**  
 AEA Annual Meeting 2015 (Boston, MA)  
 UIUC Econometrics Alumni Conference 2015 (Urbana, IL)  
 ACM Conference - Workshop on Social and Information networks (Portland, OR)  
**2014**  
 AEA Annual Meeting 2014 (Philadelphia, PA)  
**2013**  
 Choice Symposium 2013 (Noordwijk, The Netherlands)  
 Conference on Bayesian Methods in Microeconomic 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)  
 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)

**2010**

NET Institute Conference (New York, NY)

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**

European Economic Association Conference (Budapest, Hungary)

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

European Society of Population Economics Conference (Chicago, IL)

**2006**

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

TEACHING

Johns Hopkins University, Carey Business School

*Master in Finance*: Nonlinear Econometrics, Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024

*Master in Finance*: Statistical Analysis, Fall 2018

*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

*Executive MBA*: 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

*Undergraduate*: Teaching Assistant for Principles of Microeconomics, Business Statistics, 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     Network Economics: Applications and Challenges (sponsored by Sansan, Inc.), (virtual  
 ORGANIZED        mini-conference), May 21st, 2022

REFEREE            Journal of Political Economy, Quarterly Journal of Economics, Econometrica, Review of  
 ACTIVITY          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, Journal of the Royal Statistical Society: Series A,  
                             Journal of Economic Behavior and Organization, Economics Letters, Journal of Eco-  
                             nomic Theory, European Economic Review, Southern Economic Journal, Regional Sci-  
                             ence 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**

Tao Wang, JHU Economics, 2023  
Cong Mu, JHU Applied Mathematics and Statistics, 2023 (placement: Microsoft)  
Sung Ah Bahk, JHU Economics, 2020 (external member)  
Ryutah Kato, JHU Economics, 2020 (external member)  
Shaiza Qayyum, JHU Economics, 2018 (external member)  
Mikhail Smirnov, JHU Economics, 2016 (external member)  
Matthew White, JHU Economics, 2014 (external member)  
Brian Phelan, JHU Economics, 2013 (external member)  
James Lake, JHU Economics, 2012 (external member)

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

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