Marco Morucci

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Center for Data Science   www.marcomorucci.com
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New York, NY, 10003

Professional Positions

New York University
Moore-Sloan Faculty Fellow

Education

Duke University
Ph.D., Political Science, 2021
Fields: Political Methodology, Political Economy
M.S., Statistical Science 2021

London School of Economics and Political Science
M.Sc., Comparative Politics, 2013

LUISS Guido Carli
B.A., Political Science and International Relations 2012

Publications

Marco Morucci, Md. Noor-E-Alam, Cynthia Rudin
A robust approach to quantifying uncertainty in matching problems of causal inference.
INFORMS Journal on Data Science (forthcoming)

Tianyu Wang, **Marco Morucci**, M. Usaid Awan, Yameng Liu,
Sudeepa Roy, Cynthia Rudin, and Alexander Volfovsky (2022)
FLAME: A Fast Large-scale Almost Matching Exactly Approach to Causal Inference
Journal of Machine Learning Research

Marco Morucci, Vittorio Orlandi, Sudeepa Roy, Cynthia Rudin,
Alexander Volfovsky (2020)
Adaptive Hyper-box Matching for Interpretable Individualized Treatment Effect Estimation
36th Conference on Uncertainty in Artificial Intelligence (UAI)

M. Usaid Awan, **Marco Morucci**, Vittorio Orlandi, Sudeepa Roy, Cynthia Rudin,
Alexander Volfovsky (2020)
Almost-Matching-Exactly for Treatment Effect Estimation under Network Interference
23rd International Conference on Artificial Intelligence and Statistics (AISTATS)

M. Usaid Awan, Yameng Liu, **Marco Morucci**, Sudeepa Roy, Cynthia Rudin,
Alexander Volfovsky (2019)
Interpretable Almost-Matching-Exactly With Instrumental Variables
35th Conference on Uncertainty in Artificial Intelligence (UAI)

Chrysa Lamprinakou, **Marco Morucci**, Rosie Campbell,
Jennifer van Heerde-Hudson (2016) *All Change in the House?*
The Profile of Candidates and MPs in the 2015 British General Election
Parliamentary Affairs 70(2) 207–232.

Working Papers

Marco Morucci.
A Modern Matching Method for Interpretable Causal Inference

Marco Morucci, Margaret Foster, Kaitlyn Webster, So Jin Lee, and David Siegel.
Measurement That Matches Theory: Theory-Driven Identificationin in IRT Models
(Revise and Resubmit: American Political Science Review)

Marco Morucci A Fast, Cost-Efficient Image Annotation Algorithm
with an Application to Analyzing the Visual Components of protests

Marco Morucci *Credible Assumption Mixtures: Combining Point and Partial*
Identification Assumptions for Interpretable Bayesian Causal Inference

Neha R. Gupta, Vittorio Orlandi, Chia-Rui Chang, Tianyu Wang, **Marco Morucci**,
Pritam Dey, Thomas J. Howell, Xian Sun, Angikar Ghosal,
Sudeepa Roy, Cynthia Rudin, Alexander Volfovsky
dame-flame: A Python Library Providing Fast Interpretable Matching for Causal Inference

Marco Morucci, Cynthia Rudin
Matching Bounds: How Choice of Matching Algorithm Affects Treatment
Effect Estimates and What to Do about It.

Pablo Beramendi, David Dow, **Marco Morucci**, Erik Wibbels
Political and Economic Determinants of Illicit Financial Flows. (Draft available upon request)

**Awards
and Fellowships**

Duke University Political Science PhD Fellowship (2015-2020)
Duke University Summer Research fellowship (2016-2017)
Duke Political Science Evans Research Grant (2018)

Teaching

Instructor, Causal Inference (Undergraduate) Fall 2021
Center for Data Science, New York University

Teaching Assistant, Machine Learning (Graduate) Spring 2018,
Dept. of Computer Science, Duke University

Teaching Assistant, Mathematics introductory course (Graduate) Summer 2019
Dept. of Political Science, Duke University

**Conference
Presentations,
Posters
and invited talks**

International Political Economy Society (IPES) (2017)
Society for Political Methodology (POLMETH) (2018,2019,2022)
American Political Science Association (APSA) (2019,2020,2021,2022)
Conference on Uncertainty in Artificial Intelligence (UAI) (2019,2020)
Conference on Artificial Intelligence and Statistics (AISTATS) (2020)
Harvard Group on National Studies on Air Pollution and Health (2021)
Machine Learning NeEDS Mathematical Optimization YOUNG Online Seminar Series (2021)

Service   Reviewer: Political Analysis, Political Science Research Methods,
American Journal of Political Science, Journal of politics, Journal of Legislative Studies.
Lunch speaker series coordinator, NYU Center for Data Science
Graduate student organizer, 2018 Conference on political networks

Previous   Research Assistant, University College London (2014-2015)
Employment   Intern: Italiacamp association, Rome (2010-2012)

Languages   Italian: Native, Spanish: Advanced

References   David Siegel   Cynthia Rudin
Department of Political Science   Department of Computer Science
Duke University   Duke University
david.siegel@duke.edu,   cynthia@cs.duke.edu

Daniel Stegmueller   Alexander Volfovsky
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daniel.stegmueller@duke.edu,   alexander.volfovsky@duke.edu