

Stanford

Susan Athey

Economics of Technology Professor, Senior Fellow at the Stanford Institute for Economic Policy Research and Professor, by courtesy, of Economics

Bio

ACADEMIC APPOINTMENTS

- Professor, Economics
- Senior Fellow, Stanford Institute for Economic Policy Research (SIEPR)
- Professor (By courtesy), Economics
- Member, Wu Tsai Neurosciences Institute

Teaching

COURSES

2019-20

- Machine Learning and Causal Inference: ECON 293 (Spr)
- Machine Learning and Causal Inference: MGTECON 634 (Spr)
- Marketplaces for Goods and Services: STRAMGT 529 (Win)

2018-19

- Cryptocurrency: MGTECON 515 (Spr)
- Machine Learning and Causal Inference: ECON 293 (Spr)
- Machine Learning and Causal Inference: MGTECON 634 (Spr)
- Marketplaces for Goods and Services: STRAMGT 529 (Win)
- Using Technology and Market Interventions to Solve Social Problems: GSBGEN 513 (Spr)

2017-18

- Advertising and Monetization: STRAMGT 518 (Win)
- Cryptocurrency: MGTECON 515 (Spr)
- Machine Learning and Causal Inference: ECON 293 (Spr)
- Machine Learning and Causal Inference: MGTECON 634 (Spr)
- Marketplaces for Goods and Services: STRAMGT 529 (Win)

2016-17

- Advertising and Monetization: STRAMGT 518 (Win)
- Machine Learning and Causal Inference: ECON 293 (Spr)
- Machine Learning and Causal Inference: MGTECON 634 (Spr)
- Marketplaces for Goods and Services: STRAMGT 529 (Spr)
- Platform Competition in Digital Markets: MGTECON 513 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Juan Castillo, Ruoxuan Xiong

Postdoctoral Faculty Sponsor

Niall Keleher, Molly Offer-Westort, Rina Park, Lisa Simon, Erik Sverdrup

Doctoral Dissertation Advisor (AC)

Rina Friedberg, Ruohan Zhan

Master's Program Advisor

Murilo Moura

Doctoral Dissertation Co-Advisor (AC)

Karthik Rajkumar

Postdoctoral Research Mentor

Lisa Simon

Publications

PUBLICATIONS

- **Economists (and Economics) in Tech Companies** *JOURNAL OF ECONOMIC PERSPECTIVES*
Athey, S., Luca, M.
2019; 33 (1): 209–30
- **GENERALIZED RANDOM FORESTS** *ANNALS OF STATISTICS*
Athey, S., Tibshirani, J., Wager, S.
2019; 47 (2): 1148–78
- **Approximate residual balancing: debiased inference of average treatment effects in high dimensions** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
Athey, S., Imbens, G. W., Wager, S.
2018; 80 (4): 597–623
- **Estimating Heterogeneous Consumer Preferences for Restaurants and Travel Time Using Mobile Location Data**
Athey, S., Blei, D., Donnelly, R., Ruiz, F., Schmidt, T.
AMER ECONOMIC ASSOC.2018: 64–67
- **The Impact of Consumer Multi-homing on Advertising Markets and Media Competition** *MANAGEMENT SCIENCE*
Athey, S., Calvano, E., Gans, J. S.
2018; 64 (4): 1574–90
- **The value of information in monotone decision problems** *RESEARCH IN ECONOMICS*
Athey, S., Levin, J.
2018; 72 (1): 101–16
- **Estimation and Inference of Heterogeneous Treatment Effects using Random Forests** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
Wager, S., Athey, S.
2018; 113 (523): 1228–42
- **Stable Prediction across Unknown Environments**
Kuang, K., Cui, P., Athey, S., Xiong, R., Li, B., ACM
ASSOC COMPUTING MACHINERY.2018: 1617–26

- **Learning in Games with Lossy Feedback**
Zhou, Z., Mertikopoulos, P., Athey, S., Bambos, N., Glynn, P., Ye, Y., Bengio, S., Wallach, H., Larochelle, H., Grauman, K., CesaBianchi, N., Garnett, R.
NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2018
- **Exact p-Values for Network Interference** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
Athey, S., Eckles, D., Imbens, G. W.
2018; 113 (521): 230–40
- **Beyond prediction: Using big data for policy problems.** *Science (New York, N.Y.)*
Athey, S.
2017; 355 (6324): 483–85
- **Context Selection for Embedding Models**
Liu, L., Ruiz, F. R., Athey, S., Blei, D. M., Guyon, Luxburg, U. V., Bengio, S., Wallach, H., Fergus, R., Vishwanathan, S., Garnett, R.
NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2017
- **Structured Embedding Models for Grouped Data**
Rudolph, M., Ruiz, F., Athey, S., Blei, D., Guyon, Luxburg, U. V., Bengio, S., Wallach, H., Fergus, R., Vishwanathan, S., Garnett, R.
NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2017
- **Recursive partitioning for heterogeneous causal effects** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Athey, S., Imbens, G.
2016; 113 (27): 7353-7360
- **A Measure of Robustness to Misspecification** *AMERICAN ECONOMIC REVIEW*
Athey, S., Imbens, G.
2015; 105 (5): 476-480
- **Dynamics of Open Source Movements** *JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY*
Athey, S., Ellison, G.
2014; 23 (2): 294-316
- **AN EFFICIENT DYNAMIC MECHANISM** *ECONOMETRICA*
Athey, S., Segal, I.
2013; 81 (6): 2463-2485
- **Set-Asides and Subsidies in Auctions** *AMERICAN ECONOMIC JOURNAL-MICROECONOMICS*
Athey, S., Coey, D., Levin, J.
2013; 5 (1): 1-27
- **Designing efficient mechanisms for dynamic bilateral trading games** *119th Annual Meeting of the American-Economic-Association*
Athey, S., Segal, I.
AMER ECONOMIC ASSOC.2007: 131–36
- **Identification and inference in nonlinear difference-in-differences models** *ECONOMETRICA*
Athey, S., Imbens, G. W.
2006; 74 (2): 431-497
- **The optimal degree of discretion in monetary policy** *ECONOMETRICA*
Athey, S., Atkeson, A., Kehoe, P. J.
2005; 73 (5): 1431-1475
- **Collusion and price rigidity** *REVIEW OF ECONOMIC STUDIES*
Athey, S., Bagwell, K., Sanchirico, C.
2004; 71 (2): 317-349
- **Identification of standard auction models** *ECONOMETRICA*
Athey, S., Haile, P. A.
2002; 70 (6): 2107-2140

- **The impact of information technology on emergency health care outcomes** *Conference on the Industrial-Organization-of-Medical-Care*
Athey, S., Stern, S.
BLACKWELL PUBLISHING.2002: 399–432
- **Monotone comparative statics under uncertainty** *QUARTERLY JOURNAL OF ECONOMICS*
Athey, S.
2002; 117 (1): 187-223
- **Optimal collusion with private information** *RAND JOURNAL OF ECONOMICS*
Athey, S., Bagwell, K.
2001; 32 (3): 428-465
- **Organizational design: Decision rights and incentive contracts** *113th Annual Meeting of the American-Economics-Association*
Athey, S., Roberts, J.
AMER ECONOMIC ASSOC.2001: 200–205
- **Information and competition in US forest service timber auctions** *JOURNAL OF POLITICAL ECONOMY*
Athey, S., Levin, J.
2001; 109 (2): 375-417