# Alex Smolin

T.584, Toulouse School of Economics 1 Esplanade de l'Université 31080 Toulouse Cedex 06, France https://sites.google.com/site/alexeyvsmolin/ September 2025 +33 5 61128699 alexey.v.smolin@gmail.com Date of Birth: 09/09/1988

#### Research Areas:

Information Design, Mechanism Design, Game Theory, Artificial Intelligence

### **Academic Background:**

Yale University, PhD, Economics, 2016, chair: Prof. Dirk Bergemann New Economic School, MA, Economics, 2011, *summa cum laude* MIPT, Moscow, MS, Applied Mathematics, Intelligent Systems, 2011, *summa cum laude* MIPT, Moscow, BS, Mathematics and Physics, 2009

### **Academic Appointments:**

2024 - present, Chair, Artificial and Natural Intelligence Toulouse Institute

2024 – present, Editorial Board Member, Review of Economic Studies

2019 - present, Research Affiliate, CEPR

2019 – present, Assistant Professor, Toulouse School of Economics

#### **Past Appointments:**

Spring 2025, Visiting Scholar, Columbia University Fall 2024, Visiting Scholar, Northwestern University 2016 – 2019, Research Fellow, University of Bonn

#### **Publications:**

- 1. "Information Design in Smooth Games," *Theoretical Economics*, conditionally accepted, with Takuro Yamashita
- 2. "Data Provision to an Informed Seller," *Games and Economic Behavior*, 2025, 153, pp. 131-144, with Shota Ichihashi
- 3. "Persuasion and Welfare," *Journal of Political Economy*, 2024, 132(7), pp. 2451-2487, 2024, with Laura Doval
- 4. "Optimal Technology Design," *Journal of Economic Theory*, 2023, 209, 105621, with George Giorgiadis, Dan Garrett, and Balazs Szentes
- 5. "Disclosure and Pricing of Attributes," RAND Journal of Economics, 2023, 54(4), pp. 570-597
- 6. "Dynamic Evaluation Design," *American Economic Journal: Microeconomics*, 2021, 13(4), pp. 300-331
- 7. "Cream Skimming and Information Design in Matching Markets," *American Economic Journal: Microeconomics*, 2019, 11(2), pp. 250-76, with Gleb Romanyuk
- 8. "Dynamic Communication with Biased Senders," *Games and Economic Behavior*, 2018, 110, pp. 330-339, with Chiara Margaria
- 9. "The Design and Price of Information," *American Economic Review*, 2018, 108(1), pp. 1-48, with Dirk Bergemann and Alessandro Bonatti

## **Conference Proceedings:**

- 1. "The Economics of Large Language Models: Token Allocation, Fine-Tuning, and Optimal Pricing (extended abstract)," *26th ACM Conference on Economics and Computation*, 2025, with Dirk Bergemann and Alessandro Bonatti
- 2. "Buyer-Optimal Algorithmic Recommendations (extended abstract)," 26th ACM Conference on Economics and Computation, 2025, with Shota Ichihashi
- 3. "Information Design in Concave Games (extended abstract)," 23rd ACM Conference on Economics and Computation, p. 870, 2022, with Takuro Yamashita
- 4. "The Optimality of Upgrade Pricing," 2021, *Web and Internet Economics 17th Conference*, pp. 41-58, with Dirk Bergemann, Alessandro Bonatti, and Andreas Haupt

#### **Invited Articles:**

1. "The Welfare Impact of Recommendation Algorithms," *ACM SIGecom Exchanges 22 (2)*, pp. 56-65, 2025, with Laura Doval

# **Working Papers:**

- 1. "The Economics of Large Language Models: Token Allocation, Fine-Tuning, and Optimal Pricing," 2025, with Dirk Bergemann and Alessandro Bonatti
- 2. "Buyer-Optimal Algorithmic Recommendations," 2025, *Review of Economic Studies*, revision requested, with Shota Ichihashi

### Work in Progress:

- 1. "Calibrated Mechanism Design," with Laura Doval
- 2. "Designing Human-AI Interactions: Misalignment, Robustness and Trust," with Piotr Dworczak

### **Seminar and Conference Presentations:**

Scheduled: University College London, University of Naples Federico II, Carlos III University of Madrid, London School of Economics, University of Cambridge

2025: Columbia University, Johns Hopkins University, Triangle Microeconomic Conference, University of California Los Angeles, California Institute of Technology, University of Southern California, University of California San Diego, University of Virginia, Theory Summer Workshop Science Po

2024: European University Institute, Pompeu Fabra University, Ca' Foscari University of Venice, VSET, University of Barcelona Workshop, ESSET Gerzensee, Northwestern University, Berkeley-Columbia-Duke-NW-MIT IO Theory Conference, Annual Meeting of the Southern Economic Association

2023: Digital Economics Conference TSE, University of Surrey, University of Oxford, SAET Paris, University of Pennsylvania EDSR symposium, Carnegie Mellon University, Pennsylvania State University, MIT/Harvard, Northwestern University CSIO/IDEI Workshop, Workshop on the Design of Strategic Interactions in Venice

2022: University of Illinois Urbana-Champaign, Asia Online Theory Seminar, CEPR Applied IO workshop Berlin (discussant), CSIO-TSE workshop (discussant), ESSET Gerzensee, ACM EC

Boulder, EEA-ESEM Milan, EARIE Vienna, Western University, Queen's University, University of Toronto, Collegio Carlo Alberto workshop, Bonn Winter Theory Workshop

2021: Tel Aviv University / Hebrew University, University of California Los Angeles, CEPR Virtual IO Seminar, London School of Economics, Bonn Winter Theory Workshop

2020: Paris School of Economics, Parisian Game Theory Seminar, UBC-HKU Summer Theory Conference, University of St Andrews, University of Glasgow

2019: University of Edinburgh, University of Warwick, University of Amsterdam, Royal Holloway University of London, Toulouse School of Economics, Boston University, Harvard Business School, Rice University, Northwestern University (Kellogg), Michigan State University, Carnegie Mellon University (Tepper), University of Utah (Eccles), Bielefeld University, Warwick-CRETA Conference, University of Valencia, EC Workshop on the Economics of AI and Data, Collegio Carlo Alberto, HSE-Vienna Workshop on Information Economics, INFORMS Annual Meeting, Einaudi Institute for Economics and Finance

2018: ESSET Gerzensee, TWS Partners Munich, International Conference on Game Theory Stony Brook, EEA-ESEM Cologne, EARIE Athens, Aalto University, University of Oxford, Boston University, Columbia/Duke/MIT/Northwestern IO Theory Conference, Emory University, University of Nottingham, University of Essex, University of Bologna

2017: Toulouse School of Economics, Max Planck Institute Bonn, University of Mannheim, SAET Faro, NES Workshop on Imperfect Markets, Carlos III University of Madrid, NES 25th Anniversary Conference

2016: Bocconi University, Cornell University (Johnson), Indiana University (Kelley), Higher School of Economics Moscow, University of Bonn, North American Summer, Meeting of the Econometric Society, World Congress of the Game Theory Society, University of Bonn, Humboldt University of Berlin

2015: World Congress of the Econometric Society, International Conference on Game Theory Stony Brook

#### **Referee Service:**

American Economic Review, Econometrica, Journal of Political Economy, Quarterly Journal of Economics, Review of Economic Studies; American Economic Review: Insights, American Economic Journal: Microeconomics, Economic Journal, Games and Economic Behavior, Information Systems Research, International Journal of Game Theory, International Journal of Industrial Organization, Journal of Economic Theory, Journal of the European Economic Association, Journal of Law, Economics and Organization, Management Science, RAND Journal of Economics, Review of Economics and Statistics, Theoretical Economics; *National Science Foundation, U.S.-Israel Binational Science Foundation, European Research Council* 

### **Program Committee Service:**

SODA'20, EEA-ESEM'22,'23, EC'23,'24, EETC'25, EWMES'25

#### **Departmental Service:**

- TSE Economic Theory Seminar Organizer, 2019 – 2023

## **Teaching Experience:**

Toulouse School of Economics:

- Advanced Microeconomics: Bayesian Games (MA), 2022 2024
- Theory of Incentives (MA), 2020 2024
- Economics of Communication (MA/PhD), 2019 2024
- Bayesian Persuasion and Information Design (PhD), 2019 2024
- Game Theory (MA), 2019

### University of Bonn:

- Economics of Information (BS), 2018 2019
- Strategic Communication and Information Design (MS), 2017
- Strategic Communication and Information Design (BS), 2016 2018

Carnegie Mellon University, Tepper School of Business:

- Mini-Course on Information Design (PhD), September 2023

#### **Fellowships and Awards:**

Co-PI on "Trust and Responsibility in Artificial Intelligence," Artificial and Natural Intelligence Toulouse Institute, 2024 – 2028 (~230K EUR for each Co-PI)

Grant of University of Pennsylvania Center for Technology, Innovation and Competition (CTIC) and the Warren Center for Network & Data Sciences, 2022

JIE Travel Fellowship, Columbia/Duke/MIT/Northwestern IO Theory Conference, 2018 Lombard Odier Thesis Award, New Economic School, 2011

#### Languages:

English, Russian, French