

Kyubin Yim

Department of Economics,
Iowa State University, 67 Heady Halll,
518 Farm House Lane, Ames, IA 50011-1054

Phone: +1 (657) 631-2142
Email: kyubin48@iastate.edu
Website: <http://www.kyubin48.com/>
LinkedIn: <http://www.linkedin.com/in/kyubin48>

RESEARCH FIELDS

The Economics of Networks, Experimental and Behavioral Economics, Labor Economics, Finance

EDUCATION

- Ph.D. Candidate in Economics** 08/2018 – 05/2024 (expected)
Iowa State University Ames, US
- Dissertation: *Essays in the Economics of Networks: Network Analysis in Experimental Games, International Migration, and Finance*
 - Dissertation committee: Elizabeth Hoffman (advisor), Peter F. Orazem, Dermot J. Hayes, Jian Li, Otávio Bartalotti
- MS Program in Economics** 08/2017 – 05/2018
Iowa State University Ames, US
- Upgraded to Ph.D. Program in Economics
- Ph.D. in Physics** 03/2009 – 02/2015
Pohang University of Science and Technology (POSTECH) Pohang, South Korea
- Dissertation: *Understanding market microstructure of financial market using agent-based modeling*
 - Dissertation committee: Seunghwan Kim (advisor), Gabjin Oh, Beomjun Kim, Woo-Sung Jung, Sungsub Choi
- MS in Physics** 03/2006 – 02/2008
Sungkyunkwan University Suwon, South Korea
- Dissertation: *Measurement of $\frac{B(B^+ \rightarrow X(3872)K^+) \times B(X(3872) \rightarrow J/\psi \pi^+ \pi^-)}{B(B^+ \rightarrow \psi(2S)K^+) \times B(\psi(2S) \rightarrow J/\psi \pi^+ \pi^-)}$ at the Collider Detector at Fermilab*
 - Dissertation committee: Intae Yu (advisor), Suyong Choi, Yoonbai Kim
- BS in Physics** 03/2000 – 02/2006
Sungkyunkwan University Suwon, South Korea

JOB MARKET PAPER AND WORKING PAPERS

- The effect of networks on cooperation in the finitely repeated prisoner's dilemma (JMP)
- Analysis of international migration using a network approach: How is it different from international tourism?
- Measuring systemic risk in the US stock market using a network approach

PUBLICATIONS

- K.Yim, G.Oh, S.Kim, Understanding Financial Market States Using an Artificial Double Auction Market. PLoS ONE 11(3): e0152608. doi:10.1371/journal.pone.0152608 (2016)
- H.Kim, K.Yim, S.Kim, G.Oh, Nonlinear properties of the Korea fund market. Journal of the Korean Physical Society 67(12), 2039-2044 (2015)
- K.Yim, G.Oh, S.Kim, An analysis of the financial crisis in the KOSPI market using Hurst exponent. Physica A 410, 327-334 (2014)
- JG.Ha, K.Yim, S.Kim, & WS.Jung, Entropy analysis in foreign exchange markets and economic crisis. Journal of the Korean Physical Society, 61(4), 638-646 (2012)

OTHER WORKING PAPERS

- K.Yim, G.Oh, Technological Innovation, Inequality, and Financial Instability (February 16, 2016). Available at SSRN: <http://ssrn.com/abstract=2732048> or <http://dx.doi.org/10.2139/ssrn.2732048>
- K.Yim, G.Oh, S.Kim, The Effect of Fast Traders in Continuous Double Auction Market (December 10, 2015). Available at SSRN: <http://ssrn.com/abstract=2702014> or <http://dx.doi.org/10.2139/ssrn.2702014>
- K.Yim, G.Oh, S.Kim, The Effect of Heterogeneous Interactions Among Traders in an Artificial Stock Market (February 26, 2015). Available at SSRN: <http://ssrn.com/abstract=2574066> or <http://dx.doi.org/10.2139/ssrn.2574066>

TEACHING EXPERIENCE

Teaching Assistant in Economics	08/2018 – 07/2023
Department of Economics, Iowa State University	Ames, US
<ul style="list-style-type: none">• Principles of Microeconomics: Econ 101• Principles of Macroeconomics: Econ 102• Applied economic optimization: Econ 207• Intermediate Microeconomics: Econ 301• Economics of Discrimination: Econ 321• Introduction to Game Theory: Econ 418• Econometrics (Ph.D. Core): Econ 671• Microeconometrics (Ph.D. Level): Econ 673	Fall 2018, Fall 2019, Spring 2020, Fall 2022, Summer 2023 Spring 2019, Fall 2021, Spring 2022, Spring 2023, Summer 2023 (Lab Instructor) Course evaluation: 3.33/5.0, Spring 2022 (Lab Instructor) Course evaluation: 4.0/5.0, Fall 2019, Fall 2022 Spring 2021 Spring 2021 (Lab Instructor) Course evaluation: 4.6/5.0, 5.0/5.0, Fall 2020, Fall 2021 Fall 2020
Teaching Assistant in Physics	
Department of Physics, POSTECH	Pohang, South Korea
<ul style="list-style-type: none">• Introduction to Classical Mechanics	Spring 2009
Department of Physics, Sungkyunkwan University	Suwon, South Korea
<ul style="list-style-type: none">• General Physics Laboratory	Spring and Fall 2007
Instructor in Economics and Finance	
Division of Business Administration, Chosun University	Gwangju, South Korea
<ul style="list-style-type: none">• Introduction to Investment Theory• Introduction to Corporate Finance	Spring 2017 Fall 2012
Instructor and Advisor for Research and Education Program	03/2011 – 08/2012
Pocheol High School	Pohang, South Korea
<ul style="list-style-type: none">• Taught nonlinear dynamics and complex system theory to Pocheol High School students• Taught Matlab to Pocheol High School students• Conducted research with Pocheol High School students	

RESEARCH EXPERIENCE

Postdoctoral Researcher	03/2015 – 05/2016
Nonlinear and Complex System Laboratory, POSTECH	Pohang, South Korea
<ul style="list-style-type: none">• Developed agent-based financial markets• Developed business cycle fluctuation models and systemic risk models• Investigated the market microstructure of the London Stock Exchange	
Research Assistant in Physics	03/2009 – 02/2015
Nonlinear and Complex System Laboratory, POSTECH	Pohang, South Korea
<ul style="list-style-type: none">• Developed agent-based stock markets• Analyzed the microstructure in the Korea Stock Exchange using a nonlinear and complex system approach• Co-supervising and mentoring undergraduate researchers	

CONFERENCES AND PRESENTATIONS

- K.Yim, The effect of networks on cooperation in the finitely repeated prisoner's dilemma. The 2023 North American Economic Science Association Conference, UNC Charlotte, US
- K.Yim, G.Oh, A.Park, The Effect of Heterogeneous Interactions among Traders in an Artificial Stock Market. Fourth International Symposium in Computational Economics and Finance in Paris, France, 2016
- K.Yim, G.Oh, Innovation of technology, inequality, and economic stability, International Conference "Large-scale crises:1929vs2008", Ancona, Italy, 2015
- K.Yim, G.Oh, S.Kim, Understanding systemic risk in the economy using credit network model. Econophysics Colloquium, Prague, The Czech Republic, 2015
- K.Yim, A.Park, G.Oh, S.Kim, Systemic risk in banking system. Asia Pacific Econophysics Conference in Singapore, 2015
- K.Yim, G.Oh, S.Kim, The effect of fast traders in continuous double auction market. 21'st Computing in Economics and Finance, Taipei, 2015
- K.Yim, G.Oh, S.Kim, Understanding financial market state using artificial double auction market. Spring conference of Korean Physical Society, Korea, 2015
- K.Yim, G.Oh, S.Kim, Understanding asset price under heterogeneous agents using artificial double auction market. Asia-Pacific Social Simulation Workshop, Jeju, Korea, 2015
- K.Yim, G.Oh, S.Kim, The various states of market microstructure in Artificial Double Auction Market. International Finance And Banking Society, Lisbon, Portugal, 2014
- K.Yim, G.Oh, S.Kim, The impact of interaction between heterogeneous traders in artificial stock market. 19th Annual Workshop on Economic Science with Heterogeneous Interacting Agents, China, 2014
- K.Yim, G.Oh, S.Kim, The impact of heterogeneous traders in artificial double auction market. International Conference on Econophysics & Asia Pacific Econophysics Conference, Beijing, China, 2014
- K.Yim, G.Oh, S.Kim, Statistical Properties of Market Microstructure of London Stock Exchange. Spring conference of Korean Physical Society, Korea, 2014
- K.Yim, G.Oh, S.Kim, The impact of heterogeneous trading and local interaction between traders in Artificial Double Auction Market. Fall conference of Korean Physical Society, Korea, 2013
- K.Yim, G.Oh, S.Kim, Bubble and Crash in Artificial Double Auction Market. Econophysics Colloquium & Asia Pacific Econophysics Conference, Pohang, Korea, 2013
- K.Yim, G.Oh, S.Kim, Study of interaction between traders in Artificial Double Auction Market. Spring conference of Korean Physical Society, Korea, 2013
- K.Yim, G.Oh, S.Kim, Characteristics of trading interval in KOSPI, Fall conference of Korea Physical Society, Korea, 2012
- K.Yim, G.Oh, S.Kim, Dynamical and statistical properties of microstructure in KOSPI market. Asia Pacific Econophysics Conference, Taipei, 2012
- K.Yim, G.Oh, S.Kim, Statistical properties of bid-ask spread in double auction market. International Conference on Econophysics, Beijing, China, 2011
- K.Yim, G.Oh, S.Kim, Characteristics of trading interval in double auction market. Econophysics Colloquium, Taipei, 2010
- K.Yim et al (Korea CDF Collaboration), Study of $B \rightarrow X(3872) K$ decays at CDF II, Fall conference of Korean Physical Society, Korea, 2007

GRANTS

- External Grant (Not Funded) - NSF - Doctoral Dissertation Research Improvement Grant in Economics. *The effect of networks as a channel of information on cooperative behavior in human groups* 2021 (resubmission) (PI: Elizabeth Hoffman; Co-PI: Kyubin Yim) (Total Award - \$38,226, Rating: Very Good (2), Good/Fair (1), Fair (2))
- External Grant (Not Funded) - Russel Sage Foundation - Small Grants in Behavioral Economics. *The effects of networks on cooperative actions in human groups in repeated prisoner's dilemma games: which is better to promote cooperation between networks and communication?* 2021 (PI: Kyubin Yim) (Total Award - \$8,412)
- External Grant (Not Funded) - NSF - Doctoral Dissertation Research Improvement Grant in Economics. *The effect of networks as a channel of information on cooperative behavior in human groups* 2020 (PI: Elizabeth Hoffman; Co-PI: Kyubin Yim) (Total Award - \$47,523), Rating: Very Good (1), Fair (4), Poor (2))

HONORS AND AWARDS

BK21 Scholarship, The Ministry of Education, Science and Technology Department of Physics, POSTECH	03/2009 – 02/2015 Pohang, South Korea
Excellent Teaching Assistant Award Department of Physics, POSTECH	09/2009 Pohang, South Korea
BK21 Scholarship, The Ministry of Education Department of Physics, Sungkyunkwan University	03/2006 – 02/2008 Suwon, South Korea
Excellent Study Group Award College of Science, Sungkyunkwan University	Suwon, South Korea
• Team Name: General Physics Laboratory Section 77	03/2008
• Team Name: Quantum Physics	03/2007
BK21 Honor Scholarship for Outstanding Students Department of Physics, Sungkyunkwan University	03/2007 Suwon, South Korea
Simsan Scholarship for Outstanding Students Department of Physics, Sungkyunkwan University	03/2006 Suwon, South Korea

OTHER EXPERIENCE

Cultural Ambassador Program International Students and Scholars Office, Iowa State University	09/2023 – Ames, US
Residential Dining Food Service Worker Iowa State University	08/2023 – Ames, US
Visiting Graduate Student Fermi National Accelerator Laboratory	Summer 2006, Summer 2007, Winter 2007 Batavia, US
The Vice President of Physics Graduate Student Association Department of Physics, Sungkyunkwan University	03/2007 – 02/2008 Suwon, South Korea
Military Service Pyeongtaek Customs Service	03/2003 – 05/2005 Pyeongtaek, South Korea

SKILLS

Languages: Korean (Native), English (Fluent)
Object-oriented programming: C++, C#, Java, Python
Agent-based modeling frameworks: Netlogo, Repast
Data analysis frameworks: ROOT, Matlab, Octave, R, Stata
Frameworks for doing experiments: oTree
Document Creation: Microsoft Office Suite, LaTeX

REFERENCES

Elizabeth Hoffman (Major Professor)

Professor, Department of Economics, Iowa State University

Ames, US

- Phone: +1 (515) 450-1547
- Email: bhoffman@iastate.edu

Peter F. Orazem

University Professor, Department of Economics, Iowa State University

Ames, US

- Phone: +1 (515) 294-8656
- Email: pfo@iastate.edu

Dermot J. Hayes

Professor, Department of Economics, Iowa State University

Ames, US

- Phone: +1 (515) 294-6185
- Email: dhayes@iastate.edu