

Yasuaki WASA

CURRICULUM VITAE

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Department of Electrical Engineering and Bioscience,
School of Advanced Science and Engineering, Faculty of Science and Engineering,
Waseda University, Japan

3-4-1 62 Bldg.-2-12B, Okubo Shinjuku-ku, Tokyo 169-8555, Japan.

Tel: +81-3-5286-3366, E-mail: wasa@waseda.jp,

Website: <https://wasalab.w.waseda.jp/>,

[Google Scholar](#), [researchmap](#), [ResearchGate](#), [Scopus](#), [Web of Science](#),
[Waseda U Researchers Database](#)

Bio: Yasuaki Wasa is currently an associate professor in the Department of Electrical Engineering and Bioscience at Waseda University, Japan, which is joined since 2019. He received the Ph.D. degree in mechanical and control engineering from Tokyo Institute of Technology, Japan, in 2016. He was a Research Fellow of the Japan Society for the Promotion of Science from 2014 to 2017, and a postdoctoral fellow at Waseda University. He is the co-editor of [the book "Economically Enabled Energy Management" \(Springer Nature, 2020\)](#). He is a recipient of SICE Outstanding Paper Award (2015, 2023) and 2018 SICE Young Author Award. He was also awarded the Best Student Paper Award Finalist in 2014 IEEE Multi-conference on Systems and Control, and the Best Paper Award Finalist in Asian Control Conference (2019, 2022). He is the AE of SICE JCMSI and ASJC. His research interests include control and decision systems synthesis with incentive mechanism and distributed autonomy (learning/optimization/control) in games of dynamic cyber-physical & human systems. He is a member of IEEE, SICE, and ISCIE.

ACADEMIC EMPLOYMENT

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|-----------------------|--|
| Apr. 2019 – present | 早稲田大学 理工学術院 先進理工学部 電気・情報生命工学科
Department of Electrical Engineering and Bioscience, Faculty of Science and Engineering, Waseda University
Apr. 2024 – present: 准教授 Associate Professor
Apr. 2022 – Mar. 2024: 講師 (専任) Assistant Professor (tenure)
Apr. 2019 – Mar. 2022: 講師 (任期付) Assistant Professor (without tenure) |
| Apr. 2017 – Mar. 2019 | 早稲田大学 理工学術院総合研究所
Waseda Research Institute for Science and Engineering, Waseda University
次席研究員 (2017 年度研究院助教, 2018 年度研究院講師) Junior Researcher (Assistant Professor) |
| Apr. 2016 – Mar. 2020 | JST CREST 研究員 Project member at Japan Science and Technology Agency (JST), Core Research for Evolutional Science and Technology (CREST) |
| Apr. 2014 – Mar. 2017 | 日本学術振興会 特別研究員 DC1 (Apr. 2016 PD 資格変更) A Research Fellow of the Japan Society for the Promotion of Science (JSPS) |

EDUCATION

- Oct. 2013 – Mar. 2016 博士（工学），東京工業大学大学院 理工学研究科 機械制御システム専攻
Ph.D.(Eng) in Mechanical and Control Engineering,
Tokyo Institute of Technology,
Advisors: Prof. Masayuki Fujita, Assoc. Prof. Takeshi Hatanaka.
Dissertation Title: Game-theoretic Learning and Cooperative Control in
Sensor and Power Networks for Welfare Maximization
- Oct. 2011 – Sept. 2013 修士（工学），東京工業大学大学院 理工学研究科 機械制御システム専攻
M.Eng. in Mechanical and Control Engineering,
Tokyo Institute of Technology,
Advisor: Prof. Masayuki Fujita.
Dissertation Title: Game Theoretic Cooperative Network Optimization for
Distributed Microgrids: Variability Reduction of Photovoltaics
- Apr. 2008 – Sept. 2011 学士（工学），東京工業大学 工学部 制御システム工学科
B.Eng. in Control and Systems Engineering,
Tokyo Institute of Technology,
Advisor: Prof. Masayuki Fujita.
Thesis Title: Study on Potential Game Theoretic Learning Algorithms:
Effectiveness and Adaptability to Environmental Change (in Japanese)

RESEARCH INTERESTS

Our research lies in the system design, decision-making mechanism and optimization of network control systems. The goal is to establish an engineering-oriented foundational theories and applications of cooperative control, distributed learning and transaction mechanism in dynamic multi-agent systems with/without supervisors to enhance global efficiency, by using specific modeling and mathematical techniques including dynamical systems, feedback control and optimization, machine learning, game theory, contract theory, and economic theory. In particular, we push forward to the following topics:

- Algorithmic mechanism design for cognitive learning and autonomy in network games
- System-level analysis and synthesis for cyber-physical & human systems
- Biomedical control systems synthesis for sepsis and diabetes

GRANTS

- Apr. 2023 – Mar. 2026 Grants-in-Aid for Young Scientists, Japan Society for the Promotion of Science (JSPS), “Control systems design to ensure availability and reliability for fundamental theory establishment operating dynamic societal systems” (4,160,000 JPY)
- Apr. 2021 – Mar. 2025 Grants-in-Aid for Scientific Research (B), Japan Society for the Promotion of Science (JSPS), “Dynamic game analysis of international environmental agreements” (1,378,000 JPY/2yrs) (PI: Prof. Ken-Ichi Akao, Waseda University)
- Apr. 2018 – Mar. 2021 Grants-in-Aid for Young Scientists, Japan Society for the Promotion of Science (JSPS), “Dynamic incentive design and control for next-generation urban infrastructure systems” (3,640,000 JPY)
- Apr. 2014 – Mar. 2016 Grants-in-Aid for JSPS Research Fellows, “Research on creation of distributed energy management systems based on game theoretic learning” (3,070,000 JPY)

HONORS AND AWARDS

- Sep. 2023 **2023 SICE Outstanding Paper Award**
Mar. 2023 **Best Paper Award Finalist** at Asian Control Conference 2022
Mar. 2022 **10th WASEDA e-Teaching Award**
May 2021 **20th (2020) Funai Information Technology Award for Young Researchers**
Jun. 2019 **Best Paper Award Finalist** at 12th Asian Control Conference 2019
Feb. 2018 **2018 SICE Young Author Award**
Feb. 2017 **2016 Seiichi Tejima Doctoral Dissertation Award**
Mar. 2016 **2015 Research Encouragement Award** from SICE control division
Sep. 2015 **2015 SICE Outstanding Paper Award**
Oct. 2014 **Best Student Paper Award Finalist** at 2014 IEEE Multi-Conference on Systems and Control
Mar. 2014 **Miura Award** from the Japan Society of Mechanical Engineers
Mar. 2012 **Hatakeyama Award** from the Japan Society of Mechanical Engineers

HONORS AND AWARDS FOR SUPERVISED STUDENTS

- **SICE Control Division Young Author's Award**; Toshiaki Ito (2020)
- **Japan Joint Automatic Control Conference (JJACC) Outstanding Presentation Award**; Taito Watanabe (2022(65th))
- **SICE Outstanding Student Award**; Taichi Tanaka (2021AY(B)), Taito Watanabe (2022AY(M)), Takayuki Shimizu (2023AY(M))

PROFESSIONAL ACTIVITIES

Memberships

- Member of [IEEE \(The Institute of Electrical and electronics Engineers\)](#), 2014.3–
– member of [IEEE Control Systems Society](#), 2017.1–
- Member of [SICE \(The Society of Instrument and Control Engineering\)](#), 2012.1–
- Member of [ISCIE \(The Institute of Systems, Control and Information Engineers\)](#), 2016.4–
- Member of [AAERE \(The Asian Association of Environmental and Resource Economics\)](#), 2023.7–
2024.6

Academic Committees

- Journal Editorial Member:
SICE Journal of Control, Measurement, and System Integration (JCMSI) (Since Mar. 2023, Associate Editor)
Asian Journal of Control (Since Aug. 2022, Associate Editor)
- Technical Committee Member:
SICE Control Division TC on Human Recognition/Guidance Technology for Advanced Control Systems (Jan. 2024–Dec. 2025, vice-chair)
SICE Control Division TC on Human-Connected Control Systems (Jan. 2022–Dec. 2023, vice-chair)
SICE Control Division TC on Control Theory Boosted by Machine Learning (Jan. 2021–Dec. 2023, member)
IFAC2023 Industry Group SmartCity Subgroup Committee (Mar. 2021–Jul. 2023, co-chair)
SICE Control Division, Control Theory Section Committee (Apr. 2021–Mar. 2023, member)
IFAC TC9.2 (Systems and Control for Societal Impact) (Since Oct. 2020, member)

SICE Control Division TC on Cyber-Physical & Human Systems (Apr. 2019–Dec. 2020, member)

SICE Control Division TC on Control Theory Harmonized with Machine Learning (Jan. 2019–Dec. 2020, member)

- Conference Committee Member:

International Program Committee Member on SICE Annual Conference (2022, 2023, 2024)

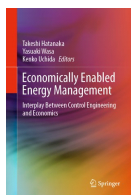
Program Committee Member on SICE International Symposium on Control Systems (2022, 2023)

Organizing committee member on 15th Conference on Transdisciplinary Science and Technology

Organizing committee member on 63rd Japan Joint Automatic Control Conference

PUBLICATIONS

Book (書籍)



- [B2] 和佐泰明, まちづくりのための電力システム制御 (仮), コロナ社, under preparation
- [B1] Takeshi Hatanaka, **Yasuaki Wasa** and Kenko Uchida (Eds.), *Economically Enabled Energy Management: Interplay between control engineering and economics*, Springer Nature, April, 2020 (ISBN:978-981-15-3575-8, DOI:10.1007/978-981-15-3576-5)

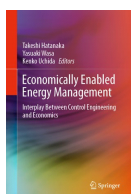
Book Chapters (書籍 (分担執筆))



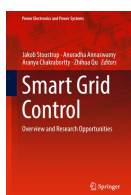
- [BC4] 和佐泰明, “6.1 数理計画問題, 6.2 意思決定の数理,” ロボット工学ハンドブック (第3版), 日本ロボット学会 編, コロナ社, 第V編 ロボット工学の基礎理論 6 計画と解探索, pp. 995–1007, 2023 (ISBN:978-4-339-04679-3)



- [BC3] **Yasuaki Wasa**, Toshiyuki Murao and Ken-Ichi Akao, “Incentive-based Economic and Physical Integration for Dynamic Power Networks,” Chapter in *Economically Enabled Energy Management: Interplay between control engineering and economics*, Takeshi Hatanaka, **Yasuaki Wasa** and Kenko Uchida (Eds.), Springer Nature, pp. 181–211, 2020 (DOI:10.1007/978-981-15-3576-5.8)



- [BC2] **Yasuaki Wasa**, Kenta Tanaka, Takao Tsuji, Shunsuke Managi and Kenko Uchida, “Economically Enabled Energy Management: Overview and Research Opportunities,” Chapter in *Economically Enabled Energy Management: Interplay between control engineering and economics*, Takeshi Hatanaka, **Yasuaki Wasa** and Kenko Uchida (Eds.), Springer Nature, pp. 1–32, 2020 (DOI:10.1007/978-981-15-3576-5.1)



- [BC1] Kenko Uchida, Kenji Hirata and **Yasuaki Wasa**, “Incentivizing Market and Control for Ancillary Services in Dynamic Power Grids,” Chapter in *Smart Grid Control: Overview and Research Opportunities*, Jakob Stoustrup, Anuradha M. Annaswamy, Aranya Chakraborty and Zhihua Qu (Eds.), Springer-Verlag, pp. 47–58, 2018 (DOI:10.1007/978-3-319-98310-3.3)

Technical Report: **Yasuaki Wasa**, Kenji Hirata and Kenko Uchida, “Contract Theory Approach to Incentivizing Market and Control Design,” downloadable at [arXiv:1709.09318](https://arxiv.org/abs/1709.09318)

Journal Publications (学術雑誌論文)

- [J] 三輪雄太, 平田研二, Tam W. Nguyen, 和佐泰明, 内田健康, “切り換えシステムを用いた 1 型糖尿病患者のグルコース-インスリン動態モデル (On Switched Models of Glucose-insulin Dynamics for Type 1 Diabetes Mellitus),” 計測自動制御学会論文集, submitted, 2024
- [J17] A. Daniel Carnerero, Taichi Tanaka, Mengmou Li, Takeshi Hatanaka, **Yasuaki Wasa**, Kenji Hirata, Yoshiaki Ushifusa, Takanori Ida, “Net-Zero Energy House-Oriented Linear Programming for the Sizing Problem of Photovoltaic Panels and Batteries,” IEEE Access, vol. 12, pp. 80429–80441, 2024 (DOI:10.1109/ACCESS.2024.3410369) (Related paper is Downloadable at [arXiv:2401.07425](https://arxiv.org/abs/2401.07425))
- [J16] Taichi Tanaka, A. Daniel Carnerero, Mengmou Li, **Yasuaki Wasa**, Kenji Hirata, Takeshi

- Hatanaka, “Game-theoretic modeling and analysis of strategic investments for PV and shared battery,” *SICE Journal of Control, Measurement, and System Integration*, vol. 17, no. 1, pp. 222–232, 2024 (DOI:10.1080/18824889.2024.2347041)
- [J15] Mengmou Li, Taichi Tanaka, A. Daniel Carnerero, **Yasuaki Wasa**, Kenji Hirata, Yasumasa Fujisaki, Yoshiaki Ushifusa, Takeshi Hatanaka, “Stochastic Optimal Investment Strategy for Net-Zero Energy Houses,” *IET Renewable Power Generation*, accepted, 2024 (DOI:10.1049/rpg2.12981) (Downloadable at [arXiv:2308.07334](https://arxiv.org/abs/2308.07334))
- [J14] **Yasuaki Wasa**, Taichi Tanaka, Tomohisa Hayakawa, “Open-loop equilibrium seeking in two-agent noncooperative LQ dynamic game with asymmetric horizon length,” *Asian Journal of Control*, accepted, 2023 (DOI:10.1002/asjc.3181)
- [J13] Shunya Yamashita, Kodai Irifune, Takeshi Hatanaka, **Yasuaki Wasa**, Kenji Hirata, Kenko Uchida, “Passivity-based Analysis and Design for Population Dynamics with Conformity Biases,” *Automatica*, vol. 158, 111300, 2023 (DOI:10.1016/j.automatica.2023.111300, Downloadable at [arXiv:2111.10560](https://arxiv.org/abs/2111.10560))
- [J12] 渡邊泰斗, 和佐泰明, 薄良彦, 平田研二, 田中健太, “行動変容効果を考慮した電力・交通システムの動的最適化と環境負荷評価 (Dynamic Optimization and Environmental Impact Assessment of Energy and Mobility Systems Considering Behavior Change Effects),” *計測自動制御学会論文集*, vol. 59, no. 9, pp. 410–417, 2023 (DOI:10.9746/sicetr.59.410)
- [J11] **Yasuaki Wasa**, Kenji Hirata and Kenko Uchida, “A contract theory approach to dynamic incentive mechanism and control synthesis for moral hazard in power grids,” *IEEE Transactions on Control Systems Technology*, vol. 30, no. 5, pp. 2072–2083, 2022 (DOI:10.1109/TCST.2021.3130922)
- [J10] 山下駿野, 入舟広大, 畑中健志, 和佐泰明, 平田研二, 内田健康, “同調バイアスを有する集団避難行動のモデル化と受動性に基づくナッジ設計 (Modeling of Collective Evacuation Behavior with Conformity Bias and Passivity-Based Nudging Design),” *計測自動制御学会論文集*, vol. 58, no. 3, pp. 120–128, 2022 (DOI:10.9746/sicetr.58.120) **SICE Outstanding Paper Award**
- [J9] Rabab Haider, Stefanos Baros, **Yasuaki Wasa**, Jordan Romvary, Kenko Uchida and Anuradha M. Annaswamy, “Towards a retail market for distribution grids,” *IEEE Transactions on Smart Grid*, vol. 11, no. 6, pp. 4891–4905, 2020 (DOI:10.1109/TSG.2020.2996565)
Press release: [Waseda U](#), [JST](#) (in Japanese)
- [J8] 檀隼人, 岡本僚太, 和佐泰明, 畑中健志, 向井正和, 飯野穰, “実時間フィードバックおよび信号最適化機能を有する交通流シミュレーション環境の構築と検証 (Design of a Traffic Simulator with Real-time Feedback and Signal Optimization and Demonstration),” *計測自動制御学会論文集*, vol. 56, no. 7, pp. 379–385, 2020 (DOI:10.9746/sicetr.56.379)
- [J7] **Yasuaki Wasa**, Kenji Hirata and Kenko Uchida, “Optimal agency contract for incentive and control under moral hazard in dynamic electric power networks,” *IET Smart Grid*, vol. 2, no. 4, pp. 594–601, 2019 (DOI:10.1049/iet-stg.2018.0256)
- [J6] 和佐泰明, 平田研二, 内田健康, “ゲーム理論的トランザクティブ制御に基づく二階層電力調整力市場設計 (Game-theoretic Transactive Control Based Two-level Electricity Balancing Market Design),” *計測自動制御学会論文集*, vol. 55, no. 6, pp. 401–410, 2019 (DOI:10.9746/sicetr.55.401)
- [J5] **Yasuaki Wasa**, Takeo Kasajima, Takeshi Hatanaka and Masayuki Fujita, “Modeling and Identification of Data Center HVAC System with Super-multipoint Temperature Sensing System,” *SICE Journal of Control, Measurement, and System Integration*, vol. 11, no. 3, pp. 221–229, 2018 (DOI:10.9746/jcmsi.11.221)
- [J4] Takeshi Hatanaka, **Yasuaki Wasa**, Riku Funada, Alexandros Charalambides and Masayuki Fujita, “A Payoff-based Learning Approach to Cooperative Environmental Monitoring for PTZ Visual Sensor Networks,” *IEEE Transactions on Automatic Control*, vol. 61, no. 3, pp. 709–724, 2016 (DOI:10.1109/TAC.2015.2450611, [arXiv:1302.2017](https://arxiv.org/abs/1302.2017))
Related Movies: [Landslide Monitoring](#), [Cloud Monitoring](#)

- [J3] **Yasuaki Wasa**, Takeshi Hatanaka and Masayuki Fujita, “Application of Irrational Decisions to Simple Experimentation to Guarantee Welfare Maximization,” *SICE Journal of Control, Measurement, and System Integration*, vol. 7, no. 4, pp. 199–204, 2014 ([DOI:10.9746/jcmsi.7.199](https://doi.org/10.9746/jcmsi.7.199))
- [J2] **Yasuaki Wasa**, Takeshi Hatanaka, Masayuki Fujita and Hideaki Takenaka, “Game Theoretic Receding Horizon Cooperative Network Formation for Distributed Microgrids: Variability Reduction of Photovoltaics,” *SICE Journal of Control, Measurement, and System Integration*, vol. 6, no. 4, pp. 281–289, 2013 ([DOI:10.9746/jcmsi.6.281](https://doi.org/10.9746/jcmsi.6.281)) **SICE Outstanding Paper Award**
Related Movie: [Network Formation for Distributed Microgrids](#)
- [J1] **和佐泰明**, 後藤達彦, 畑中健志, 藤田政之, “被覆ゲームに対する最適均衡解の探索—利得に基づく学習アルゴリズム設計 (Seeking Optimal Equilibria for Coverage Games: Payoff-based Learning Approach),” *システム制御情報学会論文誌*, vol. 25, no. 9, pp. 247–255, 2012 ([DOI:10.5687/iscie.25.247](https://doi.org/10.5687/iscie.25.247))
Related Movies: [Rational Agent vs Irrational Agents, Simulation](#)

Peer-Reviewed Conference Proceedings (国際会議論文)

- [C24] **Yasuaki Wasa**, Teruki Koizumi and Masako Kishida, “Network Topology Inference of Phase-Coupled Oscillators,” *Proc. 63rd IEEE Conference on Decision and Control*, submitted, Milan, Italy, 16–19th, Dec., 2024
- [C23] Namiki Kato, **Yasuaki Wasa** and Ken-Ichi Akao, “Equilibrium Analysis of MPC-based Climate Change Policy in Dynamic Games between Developed and Developing Regions,” *Proc. 63rd IEEE Conference on Decision and Control*, submitted, Milan, Italy, 16–19th, Dec., 2024
- [C22] Ryunosuke Higashiyama and **Yasuaki Wasa**, “Human vision-assistive control based on motion illusion for drone-swarm cooperative control in a VR environment,” *Proc. 7th IEEE Conference on Control Technology and Applications*, accepted, Newcastle upon Tyne, UK, 21–23rd, August, 2024
- [C21] Kansei Motoe and **Yasuaki Wasa**, “Incentivizing Control Design for Blockchain-Enabled Distributed Optimization in Electricity Market Systems,” *Proc. SICE International Symposium on Control Systems 2024*, pp. 60–64, Hiroshima, 19th, March, 2024 ([DOI:10.23919/SICEISCS60954.2024.10505748](https://doi.org/10.23919/SICEISCS60954.2024.10505748))
- [C20] Teruki Koizumi, **Yasuaki Wasa** and Masako Kishida, “Information Transfer-based Topology Identification of Dynamic Multi-agent Systems,” *Proc. 22nd IFAC World Congress*, pp. 4341–4346 (IFAC PaperOnLine vol. 56, no. 2, pp. 3948–3953), Yokohama, 11th, July, 2023 ([DOI:10.1016/j.ifacol.2023.10.1333](https://doi.org/10.1016/j.ifacol.2023.10.1333))
- [C19] Hanae Ofuji, **Yasuaki Wasa**, Kenji Hirata, Hidenori Kimura and Kenko Uchida, “A Mathematical Modeling and Treatment Analysis of Dynamic Glucose Metabolism with Brain-based Regulatory Mechanism,” *Proc. 22nd IFAC World Congress*, pp. 4006–4011 (IFAC PaperOnLine vol. 56, no. 2, pp. 3630–3635), Yokohama, 11th, July, 2023 ([DOI:10.1016/j.ifacol.2023.10.1525](https://doi.org/10.1016/j.ifacol.2023.10.1525))
- [C18] Taito Watanabe, **Yasuaki Wasa**, Yoshihiko Susuki, Yuta Miwa, Kenji Hirata and Kenta Tanaka, “Economic optimization for dynamic cross-sector resilience design of energy and mobility via EVs: An emergency analysis,” *Proc. 22nd IFAC World Congress*, pp. 736–741 (IFAC PaperOnLine vol. 56, no. 2, pp. 676–681), Yokohama, 10th, July, 2023 ([DOI:10.1016/j.ifacol.2023.10.1645](https://doi.org/10.1016/j.ifacol.2023.10.1645))
- [C17] Tadashi Nishio, Shinya Yasuda, Taichi Kumagai, Hiroshi Yoshida and **Yasuaki Wasa**, “Indoor Transportation System based on Human Cooperation with a Power-Assist Mobile Robot,” *Proc. 22nd IFAC World Congress*, pp. 2631–2634, Yokohama, 10th, July, 2023

- [C16] Taito Watanabe, **Yasuaki Wasa**, Yoshihiko Susuki, Kenji Hirata and Kenta Tanaka, “Dynamic Energy/Mobility Allocation with EV Consumer Behavior Coupling Transmission Power and Traffic Systems,” *Proc. 4th IFAC Workshop on Cyber-Physical and Human Systems*, pp. 26–31 (IFAC PaperOnLine vol. 55, no. 41, pp. 26–31), Houston, TX, USA, 1st, Dec., 2022 (DOI:10.1016/j.ifacol.2023.01.098)
- [C15] Takayuki Shimizu, **Yasuaki Wasa** and Kenko Uchida, “Optimal Balancing Transaction Mechanism for Dynamic Storage Management in Smart Grid,” *Proc. 6th IEEE Conference on Control Technology and Applications*, pp. 213–218, Trieste, Italy (hybrid), 23th, August, 2022 (DOI:10.1109/CCTA49430.2022.9966146)
- [C14] Taichi Tanaka, **Yasuaki Wasa** and Tomohisa Hayakawa, “Equilibrium Seeking in Two-agent Non-cooperative Dynamic Game with Asymmetric Horizon Length,” *Proc. 13th Asian Control Conference*, pp. 2286–2291, Jeju, Korea (hybrid), 6th, May, 2022 (DOI:10.23919/ASCC56756.2022.9828193) **Best Paper Award Finalist**
- [C13] Michael Hibbard, **Yasuaki Wasa** and Takashi Tanaka, “Path Integral Control for Stochastic Dynamic Traffic Routing Problems,” *Proc. 59th IEEE Conference on Decision and Control*, pp. 261–267, online (Jeju, Korea), 14th, Dec., 2020 (DOI:10.1109/CDC42340.2020.9304312)
- [C12] Shunya Yamashita, Takeshi Hatanaka, **Yasuaki Wasa**, Naoki Hayashi, Kenji Hirata and Kenko Uchida, “Passivity-Based Analysis and Nudging Design for Dynamic Social Model with Bounded Rationality,” *Proc. 3rd IFAC Workshop on Cyber-Physical & Human Systems* (IFAC PaperOnLine vol. 53, no. 5, pp. 338–343), hybrid (Beijing, China), 4th, Dec., 2020 (DOI:10.1016/j.ifacol.2021.04.189)
- [C11] **Yasuaki Wasa** and Kenko Uchida, “Strategic Bidding of Private Information for Dynamic LQ Networks under Moral Hazard,” *Proc. 21st IFAC World Congress*, pp. 6760–6766 (IFAC PaperOnLine vol. 53, no. 2, pp. 6678–6684), online (Berlin, Germany), 12th–17th, July, 2020 (DOI:10.1016/j.ifacol.2020.12.090)
- [C10] **Yasuaki Wasa**, Toshiyuki Muraio, Takashi Tanaka and Kenko Uchida, “Strategic bidding of private information for principal-agent type dynamic LQ networks,” *Proc. 17th European Control Conference*, pp. 3383–3389, Naples, Italy, 28th, June, 2019 (DOI:10.23919/ECC.2019.8796002)
- [C9] **Yasuaki Wasa** and Takashi Tanaka, “Path-Integral Control for Optimal Vehicle Routing over Nonlinear and Dynamic Traffic Systems,” *Proc. 17th European Control Conference*, pp. 2189–2196, Naples, Italy, 27th, June, 2019 (DOI:10.23919/ECC.2019.8796248)
- [C8] **Yasuaki Wasa** and Kenko Uchida, “Optimal Dynamic Incentive and Control Contract among Principal and Agents with Moral Hazard and Long-Term Average Reward,” *Proc. 2019 12th Asian Control Conference*, pp. 31–36, Kitakyushu, Fukuoka, Japan, 10th, June, 2019 (IEEE Xplore; INSPEC Accession Number: 18834065) **Best Paper Award Finalist**
- [C7] Eiji Sawada and **Yasuaki Wasa**, “Dynamic pricing and consumers’ adaptive behavior: Energy demand-supply balance when consumers update their lifestyles in the long-run,” *19th Global Conference on Environmental Taxation*, Madrid, Spain, 28th, Sep., 2018
- [C6] Ken-Ichi Akao, Kenko Uchida and **Yasuaki Wasa**, “International Environmental Agreements as an Equilibrium Choice in a Differential Game,” *6th World Congress of Environmental and Resource Economists*, Gothenburg, Sweden, 26th, June, 2018 ([link](#))
- [C5] **Yasuaki Wasa**, Kenji Hirata and Kenko Uchida, “A Dynamic Contract Mechanism for Risk-sharing Management on Interdependent Electric Power and Gas Supply Networks,” *Proc. 2017 Asian Control Conference*, pp. 1222–1227, Gold Coast, Australia, 19th, Dec., 2017 (DOI:10.1109/ASCC.2017.8287345)

- [C4] Yuko Shiomi, **Yasuaki Wasa** and Kenko Uchida, “A Lane-change Maneuver of Automated Vehicles for Improving Traffic Flow on Highways with Multiple Lanes,” *Proc. 2017 Asian Control Conference*, pp. 473–478, Gold Coast, Australia, 18th, Dec., 2017 ([DOI:10.1109/ASCC.2017.8287216](https://doi.org/10.1109/ASCC.2017.8287216))
- [C3] **Yasuaki Wasa**, Kengo Sakata, Kenji Hirata and Kenko Uchida, “Differential Game-based Load Frequency Control for Power Networks and Its Integration with Electricity Market Mechanisms,” *Proc. 1st IEEE Conference on Control Technology and Applications*, pp. 1044–1049, Kohala Coast, HI, USA, 29th, August, 2017 ([DOI:10.1109/CCTA.2017.8062597](https://doi.org/10.1109/CCTA.2017.8062597))
- [C2] **Yasuaki Wasa**, Fumiya Makihara, Akihito Kato, Takeo Kasajima, Takeshi Hatanaka and Masayuki Fujita, “Modeling of HVAC System in Data Center with Super-multipoint Temperature Sensing Technology,” *Proc. of 2014 IEEE Multi-conference on Systems and Control*, pp. 304–309, Nice-Antibes, France, 8th, Oct., 2014 ([DOI:10.1109/CCA.2014.6981363](https://doi.org/10.1109/CCA.2014.6981363))
Best Student Paper Award Finalist
- [C1] Takeshi Hatanaka, **Yasuaki Wasa** and Masayuki Fujita, “Game Theoretic Cooperative Control of PTZ Visual Sensor Networks for Environmental Change Monitoring,” *Proc. of 52nd IEEE Conference on Decision and Control*, pp. 7634–7640, Firenze, Italy, 13th, Dec., 2013 ([DOI:10.1109/CDC.2013.6761101](https://doi.org/10.1109/CDC.2013.6761101)) Related Movie: [Environmental Monitoring](#)

Discussion/Working Papers

- [DP1] **Yasuaki Wasa**, Ken-Ichi Akao and Kenko Uchida, “Optimal Dynamic Incentive Contracts between a Principal and Multiple Agents in Controlled Markov Processes: A Constructive Approach,” [Research Institute of Environmental Economics and Management \(RIEEM\)](#) Discussion Paper Series No. 2001, Waseda University, 2020 ([RIEEM DP](#))

International Conference Presentations

- [7] **Yasuaki Wasa**, Ken-Ichi Akao and Kenko Uchida, “Dynamic Incentive and Control Mechanism in a Principal-Agent Problem: A Stability Analysis in Long-Term Risk-Sensitive Case,” In Thematic Session “Introduction to Environmental Economics and Control Theory on Carbon Neutrality,” *12th Congress of the Asian Association of Environmental and Resource Economics*, Tokyo, 30th, Aug., 2023
- [6] **Yasuaki Wasa**, “Optimal transaction mechanism for dynamic storage management game in smart grid,” In Minisymposium “Recent Advances in Dynamic Games and Control Theory and Their Connection to Data Science,” *10th International Congress on Industrial and Applied Mathematics*, Tokyo, 25th, Aug., 2023
- [5] Ken-Ichi Akao, Hiroaki Sakamoto, Kenko Uchida and **Yasuaki Wasa**, “International Environmental Agreement as an Equilibrium Choice in a Differential Game,” *2021 Asian Meeting of the Econometric Society*, virtual (Sarawak, Malaysia), 26th, June, 2021
- [4] Ken-Ichi Akao, Hiroaki Sakamoto, Kenko Uchida and **Yasuaki Wasa**, “International Environmental Agreement as an Equilibrium Choice in a Differential Game,” *2019 International Conference on Public Economic Theory*, Strasbourg, France, 10th, July, 2019
- [3] Ken-Ichi Akao, Kenko Uchida and **Yasuaki Wasa**, “International Environmental Agreements as an Equilibrium Choice in a Differential Game,” *2018 Summer Congress for Korean Environmental Economics Association*, Choongnam, Korea, 27th, Aug., 2018
- [2] Ken-Ichi Akao, Kenko Uchida and **Yasuaki Wasa**, “International Environmental Agreements as an Equilibrium Choice in a Differential Game,” *Environmental and Resource Economics Workshop*, UC Davis, CA, USA, 14th, Mar., 2018

- [1] Ken-Ichi Akao, Kenko Uchida and **Yasuaki Wasa**, “International Environmental Negotiations and Agreements: A Differential Game Interpretation,” *7th Congress of the East Asian Association of Environmental and Resource Economics*, Singapore, 7th, August, 2017

国内会議論文

- [46] 三輪雄太, 平田研二, Tam W. Nguyen, **和佐泰明**, 内田健康, “グルコース-インスリン動態切り換えモデルの構築およびパラメータ推定に関する考察,” SICE 第 11 回 制御部門マルチシンポジウム予稿集, 1A3-2, 広島, 18th, Mar., 2024
- [45] 加藤波輝, **和佐泰明**, 赤尾健一, “RICE モデルを用いた多地域間非協力ゲームの気候変動政策分析,” SICE 第 11 回 制御部門マルチシンポジウム予稿集, 1A3-3, 広島, 18th, Mar., 2024
- [44] 清水健至, 立川健介, A. Daniel Carnerero, **和佐泰明**, 平田研二, “地域エネルギー管理システムにおける太陽光発電・需要予測に基づく蓄電池運用計画,” SICE 第 11 回 制御部門マルチシンポジウム予稿集, 3M7-4, 広島, 20th, Mar., 2024
- [43] **和佐泰明**, 平田研二, “メカニズムデザインに基づく人-ネットワークロボティクス協調制御,” SICE 第 11 回 制御部門マルチシンポジウム予稿集, 1M3-3, 広島, 18th, Mar., 2024
- [42] 平田研二, **和佐泰明**, “SICE における Cyber Physical Human Systems 調査研究,” 第 14 回 横幹連合コンファレンス, B-4-1, 東京, 17th, Dec., 2023 (DOI:10.11487/oukan.2023.0_B-4-1)
- [41] 清水健至, 立川健介, **和佐泰明**, 畑中健志, 平田研二, “計画値同時同量を考慮した地域エネルギー管理システムの実時間分散協調制御,” 第 66 回 自動制御連合講演会予稿集, pp. 860–864, 仙台, 8th, Oct., 2023 (DOI:10.11511/jacc.66.0_860)
- [40] 三好健太, **和佐泰明**, 岸田昌子, “塩素多点注入動的配水網システムの数理モデリングと実時間塩素濃度制御,” 第 66 回 自動制御連合講演会予稿集, pp. 865–868, 仙台, 8th, Oct., 2023 (DOI:10.11511/jacc.66.0_865)
- [39] 東山龍之介, **和佐泰明**, “VR 環境内での人-ドローン群協調制御のための運動錯覚を応用した視野制御,” 第 66 回 自動制御連合講演会予稿集, pp. 1103–1105, 仙台, 8th, Oct., 2023 (DOI:10.11511/jacc.66.0_1103)
- [38] 山上智志, **和佐泰明**, 平田研二, 畑中健志, “蓄電容量共有投資計画の均衡解に関する定量的解析,” SICE 第 10 回 制御部門マルチシンポジウム予稿集, 3M4-4, 滋賀, 11th, Mar., 2023
- [37] 梶原拓真, 平田研二, **和佐泰明**, Mengmou Li, Tam Nguyen, 畑中健志, “実需要データを利用した蓄電池シェアリングの効用推定に関する考察,” SICE 第 10 回 制御部門マルチシンポジウム予稿集, 3M4-3, 滋賀, 11th, Mar., 2023
- [36] 小泉輝起, **和佐泰明**, 岸田昌子, “マルチエージェントシステムの制御性能改善のための移動情報量を用いたネットワーク構造推定,” SICE 第 10 回 制御部門マルチシンポジウム予稿集, 1PS1-17, 滋賀, 9th, Mar., 2023
- [35] 田中大地, Mengmou Li, 畑中健志, **和佐泰明**, 平田研二, 藤崎泰正, “ZEH を前提とした蓄電池および PV の確率的最適投資戦略: 蓄電池シェアリングの観点から,” 第 65 回自動制御連合講演会予稿集, pp. 1370–1377, 宇都宮, 13th, Nov., 2022 (DOI:10.11511/jacc.65.0_1370)
田中大地: 第 65 回自動制御連合講演会優秀発表賞
- [34] 三輪雄太, Tam W. Nguyen, 平田研二, **和佐泰明**, 内田健康, “1 型糖尿病患者を対象としたグルコース-インスリン動態モデルの簡略化に関する考察,” 第 65 回自動制御連合講演会予稿集, pp. 1085–1090, 宇都宮, 13th, Nov., 2022 (DOI:10.11511/jacc.65.0_1085)
- [33] 大藤花恵, **和佐泰明**, 平田研二, 木村英紀, 内田健康, “脳による調節機構を含めた糖代謝動態数理モデルの精緻化,” 第 65 回自動制御連合講演会予稿集, pp. 1080–1084, 宇都宮, 13th, Nov., 2022 (DOI:10.11511/jacc.65.0_1080)
- [32] 飯野穰, 石塚諒一, 橋爪宗信, 川本大輔, **和佐泰明**, 薄良彦, “環境・エネルギー・電力システムの最新技術と将来ビジョン,” 第 65 回自動制御連合講演会予稿集, pp. 535–536, 宇都宮, 12th, Nov., 2022 (DOI:10.11511/jacc.65.0_535)

- [31] 渡邊泰斗, 和佐泰明, 薄良彦, 三輪雄太, 平田研二, 田中健太, “エネルギー・モビリティ動的最適化による需給バランス制御への応用,” 第 65 回自動制御連合講演会予稿集, pp. 158–161, 宇都宮, 12th, Nov., 2022 (DOI:10.11511/jacc.65.0.158)
渡邊泰斗：第 65 回自動制御連合講演会優秀発表賞
- [30] 田中大地, 和佐泰明, 早川朋久, “予測区間非対称な二人非協調動的ゲームにおける均衡探索,” SICE 第 9 回 制御部門マルチシンポジウム予稿集, 3D1-6, 10th, Mar., 2022
- [29] 和佐泰明, 田中大地, 早川朋久, “二人非協調微分ゲームにおける予測区間非対称性が与える影響,” 第 64 回自動制御連合講演会予稿集, pp. 906–910, online, 14th, Nov., 2021 (DOI:10.11511/jacc.64.0.906)
- [28] 梶原拓真, 平田研二, 和佐泰明, “電力市場取引におけるリスク回避的な市場参加者の入札行動の模擬に関する考察,” 第 64 回自動制御連合講演会予稿集, pp. 893–897, online, 14th, Nov., 2021 (DOI:10.11511/jacc.64.0.893)
- [27] 渡邊泰斗, 山上智志, 和佐泰明, 薄良彦, 平田研二, 田中健太, “環状型送電網・交通網上におけるエネルギーモビリティ併用運用の最適化,” 第 64 回自動制御連合講演会予稿集, pp. 37–42, online, 13th, Nov., 2021 (DOI:10.11511/jacc.64.0.37)
- [26] 入舟広大, 山下駿野, 畑中健志, 和佐泰明, 平田研二, 内田健康, “個人の避難行動選択における同調性バイアスのマクロ視点に基づく考察,” SICE 第 8 回 制御部門マルチシンポジウム予稿集, 3F1-3, 4th, Mar., 2021
- [25] 梶原拓真, 平田研二, 和佐泰明, “電力市場取引におけるプロスペクト理論に基づく入札者の行動戦略に関する考察,” SICE 第 8 回 制御部門マルチシンポジウム予稿集, 3E1-1, online, 4th, Mar., 2021
- [24] 和佐泰明, 上野沢真, 赤尾健一, “SEIR モデルを用いたモデル予測制御に基づく経済的感染抑制政策の考察,” SICE 第 8 回 制御部門マルチシンポジウム予稿集, 1F1-2, online, 2nd, Mar., 2021
- [23] 山下駿野, 畑中健志, 和佐泰明, 林直樹, 平田研二, 内田健康, “バイアスを含む離散選択ダイナミクス of 受動的性的解釈,” 第 63 回自動制御連合講演会予稿集, pp. 1179–1182, online, 22nd, Nov., 2020 (DOI:10.11511/jacc.63.0.1179)
山下駿野：第 63 回自動制御連合講演会優秀発表賞
- [22] 渡邊泰斗, 和佐泰明, 平田研二, “情報インセンティブによる分散 Q 学習の効果と市場動向の一検討,” 第 63 回自動制御連合講演会予稿集, pp. 1167–1170, online, 22nd, Nov., 2020 (DOI:10.11511/jacc.63.0.1167)
- [21] 和佐泰明, 内田健康, “プリンシパルエージェント型 LQ 問題における私的情報の戦略的入札と社会厚生への影響,” SICE 第 7 回 制御部門マルチシンポジウム予稿集, 2I2-4, 徳島, 4th, Mar., 2020 (開催中止, 既発表扱い)
- [20] 山岡実夢, 和佐泰明, 内田健康, “都市部高速道路上の交通流適正化のための車線変更マイクロモデルとインセンティブ設計の提案,” SICE 第 6 回 制御部門マルチシンポジウム予稿集, 1F1-1, 熊本, 7th, Mar., 2019
- [19] 伊東倫明, 和佐泰明, 内田健康, “電力スポット市場におけるインバランス精算を考慮した風力発電者の計画量決定方策,” SICE 第 6 回 制御部門マルチシンポジウム予稿集, 1F2-2, 熊本, 7th, Mar., 2019
伊東倫明：2020 年計測自動制御学会制御部門研究奨励賞
- [18] 東上里望夢, 平田研二, 和佐泰明, 澤田英司, “ダブルオークション型電力市場取引における市場参加者の入札戦略集合と社会余剰の最大化に関する考察,” SICE 第 6 回 制御部門マルチシンポジウム予稿集, 2G2-6, 熊本, 8th, Mar., 2019
- [17] 東上里望夢, 平田研二, 澤田英司, 和佐泰明, “ダブルオークション型電力市場取引における入札戦略学習と社会余剰の最大化に関する考察,” 第 61 回自動制御連合講演会予稿集, pp. 1360–1364, 名古屋, 18th, Nov., 2018 (DOI:10.11511/jacc.61.0.1360)
- [16] 中島知己, 和佐泰明, 内田健康, “契約理論に基づく動的電力ネットワークの最適制御とアンシラリーサービスの分析,” 第 61 回自動制御連合講演会予稿集, pp. 1341–1347, 名古屋, 18th, Nov., 2018 (DOI:10.11511/jacc.61.0.1341)

- [15] 大屋秀顕, 平田研二, **和佐泰明**, 澤田英司, “電力市場取引における利得関数の経済学的定義と入札戦略学習への利用,” SICE 第 5 回 制御部門マルチシンポジウム予稿集, Su53-5, 東京, 11th, Mar., 2018
- [14] **和佐泰明**, 赤尾健一, 内田健康, “電力取引システムにおけるプリンシパル・エージェント間の最適動的契約設計,” 第 60 回自動制御連合講演会予稿集, SaA1-3, 東京, 11th, Nov., 2017 (DOI:10.11511/jacc.60.0.273) **和佐：2018 年度計測自動制御学会 学術奨励賞 (研究奨励賞)**
- [13] 大屋秀顕, 平田研二, **和佐泰明**, 内田健康, “異種意思決定者の参加を可能とする大規模電力市場シミュレーション環境構築に関する研究,” 第 60 回自動制御連合講演会予稿集, SaA1-5, 東京, 11th, Nov., 2017 (DOI:10.11511/jacc.60.0.286)
- [12] 澤田英司, **和佐泰明**, “消費者の学習と需給バランスのダイナミクス,” 第 60 回自動制御連合講演会予稿集, SaA1-2, 東京, 11th, Nov., 2017 (DOI:10.11511/jacc.60.0.269)
- [11] 辻仁望, **和佐泰明**, 内田健康, “うつ病の数値モデルの構築とその解析,” 第 60 回自動制御連合講演会予稿集, SuF2-5, 東京, 12th, Nov., 2017 (DOI:10.11511/jacc.60.0.1410)
- [10] 赤尾健一, 内田健康, **和佐泰明**, “International Environmental Negotiations and Agreements: A Differential Game Interpretation,” 環境経済・政策学会 2017 年大会, 高知, 9th, Sep., 2017
- [9] 坂田健吾, **和佐泰明**, 平田研二, 内田健康, “動的ゲームに基づく電力網制御と実時間電力市場の統合,” SICE 第 4 回 制御部門マルチシンポジウム予稿集, 2C1-3, 岡山, 8th, Mar., 2017
- [8] 洪元, **和佐泰明**, 平田研二, 内田健康, “一日前市場を考慮した先物市場における電力供給戦略の学習,” 第 59 回自動制御連合講演会予稿集, pp. 161–165, ThB1-4, 福岡, 10th, Nov., 2016 (DOI:10.11511/jacc.59.0.161)
- [7] **和佐泰明**, 牧原史弥, イムジョンハ, 笠嶋丈夫, 畑中健志, 藤田政之, “超多点温度計測技術を用いたデータセンタにおける HVAC システムのモデリングと同定,” SICE 第 2 回 制御部門マルチシンポジウム予稿集, 544-3, 東京, 5th, Mar., 2015
和佐：2016 年計測自動制御学会制御部門研究奨励賞
- [6] 畑中健志, **和佐泰明**, “エネルギーマネジメントのための最適化とゲーム：システム制御分野の動向,” 第 25 回 RAMP シンポジウム予稿集, pp. 110–126, 鹿児島, 30th, Oct., 2013
- [5] **和佐泰明**, 畑中健志, 藤田政之, 竹中栄晶, “分散マイクログリッドにおける電力融通ネットワークの協調最適化：ゲーム理論的アプローチ,” 計測自動制御学会第 13 回制御部門大会予稿集, 8F2-3, 福岡, 8th, Mar., 2013
- [4] 加藤輝人, **和佐泰明**, 畑中健志, 藤田政之, “太陽光発電パネルの最適配置による効用解析,” 計測自動制御学会第 13 回制御部門大会予稿集, PS-046, 福岡, 6th, Mar., 2013
- [3] 畑中健志, **和佐泰明**, 藤田政之, “分散協調型エネルギー管理とゲーム理論的協調制御,” 第 55 回自動制御連合講演会, 京都, 18th, Nov., 2012
- [2] 畑中健志, **和佐泰明**, 難波結人, “制御実験の授業を作ってみて – 教えておきたい 3 項目 –, ” 第 55 回自動制御連合講演会予稿集, pp. 1004–1008, 京都, 18th, Nov., 2012
- [1] **和佐泰明**, 後藤達彦, 畑中健志, 藤田政之, “ポテンシャルゲームに対する非合理的選択を含む学習アルゴリズムの設計と被覆制御問題への適用,” 計測自動制御学会第 12 回制御部門大会予稿集, P0155, 奈良, 16th, Mar., 2012

Invited Articles (解説記事・招待記事)

- [7] **和佐泰明**, 平田研二, “電力市場における入札行動の分析,” システム／制御／情報, 「電力市場のモデリング・分析・デザイン」特集号, vol. 68, no. 12, under preparation, 2024
- [6] 河野道長, 井上正樹, **和佐泰明**, 平田研二, 永野善之, “サービス化するスマートシティと自動制御の役割,” (City as a Service and Potentials of Automatic Control), 計測と制御, 「新たなサービス創出のためのシステム制御・最適化とスマートシティへの挑戦」特集号, vol. 63, no. 6, pp. 331–336, 2024 (DOI:10.11499/sicej.63.331)

- [5] 和佐泰明, 平田研二, “人の意思決定を考慮したネットワークロボティクス制御のためのメカニズムデザイン,” (Mechanism Design for Control of Networked Robotics with Human Decision-Making), 日本ロボット学会誌, 「Cyber-Physical & Human Systems のためのシステム制御技術」特集号, vol. 42, no. 2, pp. 105-110, 2024 (DOI:10.7210/jrsj.42.105)
- [4] 和佐泰明, “VPP 計画・運用につながるゲーム理論の活用法,” (Utilization of game theory leading to VPP planning and operation), 計測と制御, 「Virtual Power Plant (VPP) - 制御と最適化が切り開く新時代 -」特集号, vol. 63, no. 1, pp. 36-42, 2024 (DOI:10.11499/sicejl.63.36)
- [3] 和佐泰明, 飯野穰, 内田健康, “需要者の意志を反映する小売電力市場メカニズムの開発: スマートシティ実現に向けたシステム思考型イノベーション,” 日本工業出版 クリーンエネルギー, vol. 29, no. 10, pp. 5-10, 2020
- [2] 和佐泰明, 内田健康, “システム制御の知見に基づく小売電力市場メカニズムの開発,” 電気総合誌 OHM, vol. 107, no. 9, pp. 38-41, 2020 (selected as [the front cover of the issue](#))
- [1] 和佐泰明, “制御の立場から見た動的市場メカニズム設計,” (Dynamic market mechanism design from control perspective), 計測と制御, vol. 58, no. 9, pp. 726, 2019 (DOI:10.11499/sicejl.58.726)

Invited/Organized Session Proposal

- [13] 平田研二, 井上正樹, 和佐泰明, “人とつながる制御システムの新潮流,” 第 11 回計測自動制御学会制御部門マルチシンポジウム, 広島, 18th, Mar., 2024
- [12] 畑中健志, 平田研二, 和佐泰明, 永原正章, “ネット・ゼロ・エネルギー・ハウス移行促進のためのシステム制御の役割,” 第 11 回計測自動制御学会制御部門マルチシンポジウム, 広島, 20th, Mar., 2024
- [11] 平田研二, 井上正樹, 和佐泰明, “人とつながる制御システムの理論と応用,” 第 66 回自動制御連合講演会, 仙台, 8th, Oct., 2023
- [10] Kenji Hirata, Masaki Inoue and **Yasuaki Wasa**, “New Trends in Human-connected Control Design for Better Social Acceptance,” 22nd IFAC World Congress, Yokohama, Japan, 11th, July, 2023
- [9] 平田研二, 井上正樹, 和佐泰明, “人とつながる制御システムのための新たな学術展開,” 第 10 回計測自動制御学会制御部門マルチシンポジウム, 滋賀, 11th, Mar., 2023
- [8] Kenji Hirata, Masaki Inoue and **Yasuaki Wasa**, “Control System Design Integrating Mobility with Human Decision Making,” 4th IFAC Workshop on Cyber-Physical and Human Systems, Houston, TX, USA, 1st, Dec., 2022
- [7] 平田研二, 井上正樹, 和佐泰明, “人とつながる制御システムの新展開,” 第 65 回自動制御連合講演会, 宇都宮, 13th, Nov., 2022
- [6] 平田研二, 井上正樹, 和佐泰明, “モビリティにおける人の意思決定と制御系設計,” 第 65 回自動制御連合講演会, 宇都宮, 12th, Nov., 2022
- [5] 早川朋久, 和佐泰明, “人・社会・経済と制御理論,” 第 64 回自動制御連合講演会, online, 14th, Nov., 2021
- [4] Takeshi Hatanaka, **Yasuaki Wasa** and Toru Namerikawa, “Modeling, Control and Economical Methods for Distributed Energy Management,” 12th Asian Control Conference, Kitakyushu, Fukuoka, Japan, 10th, June, 2019
- [3] 平田研二, 和佐泰明, 滑川徹, “次世代 EMS 構築のための経済・物理・制御の融合展開,” 第 61 回自動制御連合講演会, 愛知, 18th, Nov., 2018
- [2] 平田研二, 和佐泰明, “経済モデルおよび物理モデルの融合視点による次世代電力市場構築に向けた設計・調整・学習,” 第 60 回自動制御連合講演会, 東京, 11th, Nov., 2017
- [1] 平田研二, 和佐泰明, “経済及び物理の融合視点から見る次世代エネルギー需給ネットワークの構築,” 第 59 回自動制御連合講演会, 福岡, 10th, Nov., 2016

Workshops, Forums, Seminars (講演・セミナー・フォーラム等 (国際))

- [19] Economic and human-centric aspects: Integration by market mechanism, control and technology diffusion for sharing systems (with Kenji Hirata, Kenta Tanaka); In Workshop “Sharing Systems for Energy and Mobility: Overview and Emergent Topics,” SICE Annual Conference 2021, online, 7th, Sep., 2021
- [18] Dynamic incentive mechanism, control and learning in deregulated electricity markets; 2019 JST-NSF-RCN Workshop on Distributed Energy Management Systems, Tokyo, Japan, 20th, June, 2019 ([JST report](#))
- [17] Contract theory based control/incentive synthesis in dynamic power networks; 2019 JST-NSF-RCN Joint Workshop on Distributed Energy Management and Data Sciences for Smart Grids, Bombay, India, 13th, January, 2019 ([link](#))
- [16] Control/incentive design and performance analysis for ancillary services in dynamic power network: A contract theory approach; The 3rd Workshop on Management and Control of Energy Supply-demand Networks with Renewables, Yokohama, Japan, 10th, Nov., 2018
- [15] Optimal control/incentive based on contract theory and analysis of ancillary services in dynamic power network; The 4th Workshop on Management and Control of Energy Supply-demand Networks with Renewables, Notre Dame, IN, USA, 24th, Oct., 2018
- [14] Dynamic Incentive Contracts between a Principal and Multiple Agents in Energy Transaction Systems; Workshop COOPS 2017, Milano, Italy, 15th, Nov., 2017 ([link](#))
- [13] Dynamic Incentive Contracts between a Principal and Multiple Agents in Energy Transaction Systems; The 2nd Workshop on Management and Control of Energy Supply-demand Networks with Renewables, Stuttgart, Germany, 14th, Sep., 2017
- [12] Dynamic Incentive Contracts between a Principal and Multiple Agents in Energy Transaction Systems; Karlsruhe Institute of Technology (ISAS), Karlsruhe, Germany, 12th, Sep., 2017
- [11] A System Architecture for Realizing Energy Market Simulator; 2017 JST-NSF-RCN Joint Workshop on Distributed Energy Management Systems, Tokyo, Japan, 12th, June, 2017
- [10] Differential Game Based Control for Dynamic Power Networks and Its Integration with Electricity Market Mechanism; Workshop on Management and Control of Energy Supply-demand Networks with Renewables -Toward international collaborations between DFG and JST CREST projects-, Tokyo, Japan, 2nd, Mar., 2017
- [9] Verification of Demand-Supply Balance When Consumers Update Their Preferences (with Eiji Sawada); UHM CSS-JST CREST Workshop on Energy Economics -Policy issue for designing an efficient electricity industry with responsive customers from short-term and long-term perspectives-, Hawaii, HI, USA, 11th, Feb., 2017
- [8] A Dynamic Contract Mechanism under Moral Hazard for Risk-sharing Management; KTH Royal Institute of Technology, Stockholm, Sweden, 24th, Jan., 2017 ([link](#))
- [7] Energy Supply-demand Network Simulator Integrating Economic Models and Physical Models: A Project Outline and A Test Model; CREST/COOPS Young Researchers Workshop, Tokyo, Japan, 17th, Sep., 2016
- [6] A Plan for Establishing Energy Network Simulator Based on Integration of Economic, Physical and Learning Models; The 3rd Workshop on Energy Supply-demand Networks with Renewables based on Integration of Economic Models and Physical Models -Toward international collaborations between NSF and JST CREST projects-, Tokyo, Japan, 6th, Sep., 2016
- [5] Game Theoretic Cooperative Environmental Monitoring for PTZ Visual Sensor Networks (with Takeshi Hatanaka, Masayuki Fujita); 1st International Engineering Forum 2016 by Taiwan Tech and Tokyo Tech (IEF2016), Taipei, Taiwan, 20th-22nd, Feb., P-13, 2016

- [4] Game Theoretic Learning to Guarantee Global Objective Maximization: Refinement of Exploration and Exploitation with Irrational Decisions; ISYS Kolloquium Technische Kybernetik, University of Stuttgart, Germany, 6th, Nov., 2015
- [3] Game Theoretic Learning to Guarantee Global Objective Maximization: Refinement of Exploration and Exploitation with Irrational Decisions; Pennsylvania State University, State College, PA, USA, 7th, Oct., 2015
- [2] Modeling and Control of HVAC System in Data Center with Super-multipoint Temperature Sensing Technology; University of California, Los Angeles, CA, USA, 11th, Dec., 2014
- [1] Payoff-based Learning with Irrational Decisions and its Application; University of Stuttgart (ISYS), Germany, 6th, Dec., 2013

講演・セミナー・フォーラム等（国内）

- [8] 人とつながるシステム制御の構築を目指して—ロボット群の制御の観点から—; 名古屋工業大学 機械制御システム研究室, 愛知, 21st, May., 2024
- [7] 経済で千姿万態のEMSを上手に結びつける市場設計; [CREST EMS 研究領域公開シンポジウム—Society 5.0に向けた未来のエネルギーマネジメントシステム構築—（システム構築デモンストレーションセッション）](#), 東京, 18th, Sep., 2018
Related Movie: ([Introduction Movie](#))
- [6] EMS CREST 内田最強チームにおけるデータ利活用計画; NPO 法人 太陽放射コンソーシアム 平成30年度 第1回説明会・報告会, 東京, 31st, Jul., 2018
- [5] 電力取引システムにおけるプリンシパル・エージェント間の最適動的契約設計; CREST EMS 領域内田最強チーム第13回ミーティング, 東京, 22nd, Aug., 2017
- [4] 電力市場シミュレータ開発について: 目的・進捗・展望 (with 平田研二, 内田健康); CREST EMS 領域内田最強チーム第8回ミーティング, 京都, 17th, Jun., 2016
- [3] 電力需給ネットワークに対する分散協調最適化と電力市場の融合; SICE 制御部門 制御理論部会 制御理論合宿, 新潟, 23rd-24th, Sep., 2014
- [2] 電力融通ネットワークのゲーム理論的分散協調最適化; [平成25年度博士学生交流フォーラム](#), 京都, 8th-9th, Nov., 2013
- [1] ポテンシャルゲーム理論を用いた協調制御: 環境把握と再生可能エネルギー管理へのアプローチ; 東京工業大学 社会工学専攻 武藤滋夫研究室セミナー, 10th, Aug., 2012

講演・セミナー・フォーラム・記事等（学内）

- 新任教員挨拶; 早稲田電気工学会会報第65号, pp. 35–36, Mar. 2024
- 和佐泰明研究室の取組紹介 人と繋がるシステム制御に関する研究; [早稲田オープン・イノベーション・フォーラム2023\(WOI'23\)](#), 9–10th, Nov., 2023
- 人とつながる制御システムの現在と未来 ～自動運転・スマートシティ・生体システムへの展開～; [EWE](#) 三月会, 20th, Sep., 2022
- ご着任の教員から: 新たなシステム制御を目指して; [早稲田大学理工学術院報「塔」](#) 97号, Mar., 2022
- 制御ってなに? 自動運転・スマートシティ・そして生命; オープンキャンパス 電生模擬講義, 早稲田大学, 4th, Aug., 2019
- 情報系のフロンティア (システム制御・最適化・学習); 電気・情報生命工学フロンティア, 早稲田大学, 19th, Jul., 2018

Other Activities (その他)

- Yasuaki Wasa, Co-Chair of Session “Distributed Energy Management towards Clean and Energy Efficient Society,” 1st IEEE Conference on Control Technology and Applications, Aug. 2017
- Yasuaki Wasa, Nana Shimomura, Yoshikatsu Hirayama, Juri Ito, Takeshi Hatanaka and Masayuki Fujita, “All are described by control systems,” IEEE CSS Video Clip Contest 2015 ([movie](#))

SUPERVISED STUDENTS' DISSERTATIONS

第5期生

阿部 元紀 (Motonori ABE)

(B:2023.09-2025.03, expected)

伊藤 潤成 (Junsei ITO)

(B:2023.09-2025.03, expected)

倉見 明日花 (Asuka KURAMI)

(B:2023.09-2025.03, expected)

竹内 天寧 (Amane TAKEUCHI)

(B:2023.09-2025.03, expected)

田中 碧那 (Aona TANAKA)

(B:2023.09-2025.03, expected)

宮本 真菜 (Mana MIYAMOTO)

(B:2023.09-2025.03, expected)

渡邊 大希 (Haruki WATANABE)

(B:2023.09-2025.03, expected)

第4期生

落合 泰己 (Taiki OCHIAI)

(M:2024.04-2026.03, expected)

(B:2022.09-2024.03) 局所的移動方向データを利用した人流推定の精度向上に関する研究

柏本 悠多 (Yuta KASHIMOTO)

(M:2024.04-2026.03, expected)

(B:2022.09-2024.03) 自律二輪車両の逐次最適化制御のための RRT による時間微分可能な経路計画と検証

加藤 波輝 (Namiki KATO)

(M:2024.04-2026.03, expected)

(B:2022.09-2024.03) RICE モデルを用いた気温制約付気候・経済最適配分ゲームに関する解析

田中 海里 (Kairi TANAKA)

(M:2024.04-2026.03, expected)

(B:2021.09-2024.03) レプチン併用治療を行う一型糖尿病患者に対するインスリン投与の適応制御

中島 航平 (Kohei NAKAJIMA)

(M:2024.04-2026.03, expected)

(B:2022.09-2024.03) 複数ドローンを用いた非 GPS 環境における地図作成アルゴリズムの実装

元永 寛勢 (Kansei MOTOE)

(M:2024.04-2026.03, expected)

(B:2022.09-2024.03) 電力市場におけるブロックチェーンを用いたメカニズムデザイン実装の一検討

梁嶋 柁冶 (Shuya YANASHIMA)

(M:2024.04-2026.03, expected)

(B:2022.09-2024.03) 巡回監視問題におけるマルコフ連鎖の過渡応答特性改善法の提案

第3期生

立川 健介 (Kensuke TATSUKAWA)

(M:2023.04-2025.03, expected)

(B:2021.09-2023.03) 衝突回避特性と軌道追従性を保証する人の運転アシスト制御の実機実装

浜中 樹 (Tatsuki HAMANAKA)

(M:2023.04-2025.03, expected)

東山 龍之介 (Ryunosuke HIGASHIYAMA)

(M:2023.04-2025.03, expected)

(B:2021.09-2023.03) VR 空間上で人と協調するドローン群制御の環境構築と性能解析

大石 実奈 (Mina OISHI)

(B:2021.09-2023.03) 脱炭素化のための火力発電の石炭・アンモニア混焼導入シナリオの一検討

古賀 柁帆 (Shuho KOGA)

(B:2021.09-2023.03) ガウス過程回帰を用いた被覆制御による非連続環境の推定

森谷 恵多 (Keita MORIYA)

(B:2021.09-2023.03) 筋電位測定に順応する遅筋と速筋を考慮した筋疲労数理モデルの提案と解析

第2期生

大藤 花恵 (Hanae OFUJI)

(M:2022.04-2024.03) 脂質摂取を考慮した糖代謝動態数理モデルの構築と食生活の影響分析

(B:2020.09-2022.03) インスリン・レプチン併用糖尿病治療のための糖代謝動態数理モデルの精微化

小泉 輝起 (Teruki KOIZUMI)

(M:2022.04-2024.03) 位相結合振動子系の同期制御のための状態量に基づく実時間通信構造推定

(B:2020.09-2022.03) 移動障害物回避性能改善のための制御バリア関数を用いた制御系設計

清水 健至 (Takayuki SHIMIZU)

(M:2022.04-2024.03) 分散協調型住宅地域エネルギー管理システムの設計と実時間制御に関する研究 **SICE 優秀学生賞**

(B:2020.09-2022.03) スマートグリッド内需給均衡を実現する二段階蓄電調整メカニズム

西尾 正 (Tadashi NISHIO)

(M:2022.04-2024.03) LiDAR データを用いたノンホロノミック移動体群の自律分散型被覆制御と実機検証

(B:2020.09-2022.03) 制御リアプノフ関数を用いた移動ロボットの軌道追従制御

三好 健太 (Kenta MIYOSHI)

(M:2022.04-2024.03) EPANET を用いた配水網システムの実時間多点注入塩素濃度制御

(B:2020.09-2022.03) 複数車両モデル混在時における V2V2I を利用した車間制御

末吉 耕大 (Kota SUEYOSHI)

(B:2020.09-2022.03) ガウス過程回帰に基づく信頼度を考慮した被覆制御の効率化

田中 大地 (Taichi TANAKA)

(B:2020.09-2022.03) 動的システム下での非対称予測区間2人非協力ゲームの均衡解探索 **SICE 優秀学生賞**

第1期生

上野 拓真 (Takuma UENO)

(M:2021.04-2023.03) バイタルサインデータ利用を想定した敗血症性ショック患者数理モデルの内部状態推定手法の検討

(B:2019.09-2021.03) SEIR モデルを用いた感染症の人口動態解析と経済的評価に基づく最適制御

山上 智志 (Satoshi YAMAKAMI)

(M:2021.04-2023.03) 蓄電容量投資計画問題における実需要データを用いた均衡分析とコスト評価

(B:2019.09-2021.03) 環状型高速道路における自動運転車両群の実時間交通状況評価

渡邊 泰斗 (Taito WATANABE)

(M:2021.09-2023.03) 人の意思決定を考慮した送電・交通システム併用運用の動的最適化 **専攻総代, SICE 優秀学生賞**

(B:2019.09-2021.03) 機械学習ベースの市場参加者による市場動向の影響解析

鈴木 嵩茂 (Takashige SUZUKI)

(B:2019.09-2021.03) 未知の非凸領域に対する協調被覆制御:「たわみ」から着想した実装方策の提案