Dazhu Li

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ACADEMIC POSITIONS

- **Institute of Philosophy, Chinese Academy of Sciences &**
  Department of Philosophy, University of Chinese Academy of Sciences   Beijing, China
  Associate Professor   *Dec. 2023 - present*
  Assistant Professor   *Nov. 2021 - Dec. 2023*

- **Nicolaus Copernicus University in Toruń**   Toruń, Poland
  Visiting Scholar   *Aug. 2023 - Oct. 2023*

EDUCATION

- **Ph.D. in Logic**   Sep. 2017 - Oct. 2021
  Department of Philosophy, Tsinghua University   *Beijing, China*
  Institute for Logic, Language and Computation, University of Amsterdam   *Amsterdam, The Netherlands*
    - Supervisors: Prof. Fenrong Liu, Prof. Johan van Benthem, Dr. Alexandru Baltag
    - Dissertation: Formal Threads in the Social Fabric: Studies in the Logical Dynamics of Multi-Agent Interaction

- **Master of Logic**   Sep. 2013 - July 2017
  Department of Philosophy, Peking University   *Beijing, China*
    - Supervisor: Prof. Yanjing Wang
    - Thesis: Modal Mereology (in Chinese)

- **Bachelor of Philosophy**   Sep. 2009 - July 2013
  Department of Philosophy, Zhengzhou University   *Zhengzhou, China*

RESEARCH INTERESTS

- **Logic**
  Modal Logic, Dynamic Logic, Epistemic Logic

- **Applications of Logic**
  Logic in Philosophy, Games and Social Networks

RESEARCH

(* indicates corresponding author)

- **In Journals:**

    1. Katsuhiko Sano, Fenrong Liu, **Dazhu Li***. Hybrid logic of the hide and seek game. *Studia Logica*, Accepted. 2024.

2. Rafał Gruszczyński, **Dazhu Li***. The sum relation as a primitive concept of mereology. *Studia Logica*, Accepted. 2024.

3. **Dazhu Li**, Sujata Ghosh*, Fenrong Liu, Yaxin Tu. A simple logic of the hide and seek game. *Studia Logica* **111** (5): 821-853, 2023. (An extension of the WoLLIC 2021 paper)

4. **Dazhu Li**, Yanjing Wang*. Mereological bimodal logics. *The Review of Symbolic Logic* **15** (4): 823-858, 2022.

5. Fenrong Liu, **Dazhu Li***. Ten-year history of social network logics in China. *Asian Studies* **10** (2): 121-146, 2022.

6. Alexandru Baltag, **Dazhu Li***, Mina Young Pedersen. A modal logic for supervised learning. *Journal of Logic, Language and Information* **31** (2): 213-234, 2022. (An extension of the LORI 2019 paper)

7. **Dazhu Li***. Losing connection: the modal logic of definable link deletion. *Journal of Logic and Computation* **30** (3): 715-743, 2020.

- **In Conference Proceedings:**

  1. Qian Chen, **Dazhu Li***. Logic of the hide and seek game: characterization, axiomatization, decidability. In N. Gierasimczuk and F. R. Velázquez-Quesada, eds., *Proceedings of DaLí 2023*, vol. 14401 of Lecture Notes in Computer Science, pp. 20-34, Springer, 2024.

  2. **Dazhu Li**, Sujata Ghosh*, Fenrong Liu, Yaxin Tu. On the subtle nature of a simple logic of the hide and seek game. In A. Silva, R. Wassermann and R. de Queiroz, eds., *Logic, Language, Information, and Computation (WoLLIC 2021)*, vol. 13038 of Lecture Notes in Computer Science, pp. 201-218, Springer, 2021.

  3. Alexandru Baltag, **Dazhu Li***, Mina Young Pedersen. On the right path: a modal logic for supervised learning. In P. Blackburn, E. Lorini and M. Guo, eds., *Proceedings of LORI 2019*, vol. 11813 of Lecture Notes in Computer Science, pp. 1-14, Springer, 2019.

- **Under Submission:**

  1. Alexandru Baltag, Johan van Benthem, **Dazhu Li***. Dependence logics in temporal settings. 2024.

  2. Yaxin Tu, Sujata Ghosh, Fenrong Liu, **Dazhu Li***. A modal approach towards substitutions. 2024.

  3. Penghao Du, Dazhu Li, **Fenrong Liu***. Modal logics for the poison game: Axiomatization and undecidability. 2024.

- **In Progress:**

  1. Modal Logic (in Chinese)

     Joint work with Johan van Benthem and Xinwen Liu

  2. Decidability of the hybrid logic of hide and seek games

     Joint work with Fenrong Liu and Katsuhiko Sano

  3. Epistemic logic of hide and seek games

     Joint work with Sujata Ghosh and Fenrong Liu

  4. Modal logic of substitution

     Joint work with Sujata Ghosh, Fenrong Liu and Yaxin Tu

  5. Topological approach to mereological sum and fusion

     Joint work with Rafał Gruszczyński

1. Modal logics for mereology. Interdisciplinary Seminar on Logic, Cognition and Mathmatical Philosophy, Sanya, China, April 29 - May 3, 2024.

2. A modal approach towards substitutions. SWU-UiB Logic Workshop. Chongqing, China. March 27-28, 2024.

3. Tableau calculi for the hybrid logic of the hide and seek game and further extensions. Sapporo One-day Workshop on Hybrid Logic and Proof Theory. Sapporo, Japan. March 7, 2024.

4. Action-information interplay in cops and robbers games. Bridges between Logic, Ethics and Social Sciences (BLESS). Toruń, Poland. November 22-25, 2023.

5. A logical approach to learning process. Logic Meets Norms. Tsinghua University, Beijing, China. May 29, 2023.

6. Logical approaches to the Cops and Robber game. Chinese Annual Conference on Mathmatical Logic. China. November 25-27, 2022.

7. Hybrid logic of the hide and seek game. Sichuan University. November 24, 2022.

8. A logical analysis of dynamic dependence. Tsing Ch'a Sessions. Tsinghua University, Beijing, China. May 26, 2022.

9. Mereological bimodal logics. Beijing Normal University, Beijing China. March 25, 2022.

10. Undecidability of the logic of hide and seek games. Indian Statistical Institute, Online. June 16, 2021.

11. A modal logic for supervised learning. LIRa Seminar. University of Amsterdam, Amsterdam, The Netherlands. January 23, 2020.

12. Dynamic epistemic logics in social networks. Logic Salon. Tsinghua University, Beijing, China. October 23, 2019.

13. Losing connection: modal logics of definable link deletion. The 13th Conference on Logic and the Foundations of Game and Decision Theory (LOFT 2018). Milan, Italy. July 16-18, 2018.

14. Modal mereology. Non-classical Modal and Predicate Logics: The 9th International Workshop on Logic and Cognition. Guangzhou, China. December 4-8, 2017.

Projects

- **As PI:**

  1. Neighborhood Semantic Approach towards Mereology   Aug. 2023 - Oct. 2023
     "Excellence Initiative - Research University" Program,
     Nicolaus Copernicus University in Toruń [16/2023/Mobility]
  2. Logics for Strategy, Dependence and Stability in Multi-Agent Interaction   Sep. 2022 - June 2026
     National Social Science Foundation of China [22CZX063]

- **As Participant:**

  1. A Study of Logic of Human Reasoning based on Image Schema Theory   Sep. 2023 - June 2027
     PI: Chao Xu, Shanxi University
     National Social Science Foundation of China [23BZX126]

2. Study on the Reasoning and Argument Patterns in Hongming Collection June 2022 - Aug. 2025
    PI: Liying Zhang, Chinese Academy of Sciences
    National Social Science Foundation of China [20BZX103]
3. Logics of Information Flow in Social Networks Dec. 2017 - Jan. 2022
    PI: Fenrong Liu, Tsinghua University
    Major Program of the National Social Science Foundation of China [17ZDA026]

Teaching

- **University of Chinese Academy of Sciences**
    - Introduction to Modern Logic Spring 2024
    - Logic and Critical Thinking Spring 2022, Spring 2023
    - University Writing Spring 2023, Spring 2024

Professional experience

- **Served as Reviewer for:**

    Erkenntnis (2022), Studies in Logic (2022), Synthese (2022), International Conference on Logic, Rationality and Interaction (LORI 2021,2023), National Conference on Modern Logic (2022), Theoretical Aspects of Rationality & Knowledge (TARK 2023), Pacific Rim International Conference on Artificial Intelligence (PRICAI 2023), Asian Workshop on Philosophical Logic (AWPL 2023), Chinese Philosophical Review (2024), Workshop on Logic, Language, Information and Computation (WoLLIC 2024), ESSLLI Student Session (2024).

- **PC Member of:**

    National Conference on Modern Logic 2022, Pacific Rim International Conference on Artificial Intelligence (PRICAI 2023), Asian Workshop on Philosophical Logic (AWPL 2024), ESSLLI Student Session (2024)