Tatsuya Terao

Doctoral Student

Research Institute for Mathematical Sciences, Kyoto University, Kyoto 606-8502, Japan

ttatsuya@kurims.kyoto-u.ac.jp | otera99.github.io/

Research Interests

- Theoretical Computer Science.

Education

Kyoto University *Kyoto, Japan*

Doctor of Science *April 1, 2024 - present*

- Advisor: Prof. Yusuke Kobayashi

Kyoto University *Kyoto, Japan*

Master of Science *April 1, 2022 - March 31, 2024*

- Advisor: Prof. Yusuke Kobayashi

Kyoto University *Kyoto, Japan*

Bachelor of Science *April 1, 2018 - March 31, 2022*

- Faculty of Science, Division of Physics

Professional Experience

2024-2027 Research Fellowships for Young Scientists (DC1), Japan Society for the Promotion of Science

Publications

Authors are listed alphabetically. Exceptions are marked with †.

1. Tatsuya Terao and Ryuhei Mori: Parameterized Quantum Query Algorithms for Graph Problems †,
   In Proceedings of the 32nd Annual European Symposium on Algorithms (**ESA 2024**), 99:1-99:16.
   doi:10.4230/LIPIcs.ESA.2024.99
2. Yusuke Kobayashi and Tatsuya Terao: Subquadratic Submodular Maximization with a General Matroid Constraint,
   In Proceedings of the 51st EATCS International Colloquium on Automata, Languages and Programming (**ICALP 2024**), 100:1–100:19.
   doi:10.4230/LIPIcs.ICALP.2024.100
3. Tatsuya Terao: Faster Matroid Partition Algorithms,
   In ACM Transactions on Algorithms (**TALG**), Volume 21, Issue 2, 2025.
   doi:10.1145/3707208
   Preliminary version appeared in proceedings of the 50th EATCS International Colloquium on Automata, Languages and Programming (**ICALP 2023**), 104:1–104:20.
   doi:10.4230/LIPIcs.ICALP.2023.104
4. Yusuke Kobayashi and Tatsuya Terao: One-Face Shortest Disjoint Paths with a Deviation Terminal,
   In Proceedings of the 33rd International Symposium on Algorithms and Computation (**ISAAC 2022**), 47:1–47:15.
   doi:10.4230/LIPIcs.ISAAC.2022.47

Presentations

- Parameterized Quantum Query Algorithms for Graph Problems.
  - ESA 2024, Egham, United Kingdom, Sep 4, 2024.
- Subquadratic Submodular Maximization with a General Matroid Constraint.
  - ICALP 2024, Tallinn, Estonia, July 9, 2024.

- Faster Matroid Partition Algorithms.
  - ICALP 2023, Paderborn, Germany, July 14, 2023.
- One-Face Shortest Disjoint Paths with a Deviation Terminal.
  - ISAAC 2022, Seoul, Korea, Dec 20, 2022.