

Education

- Mar 2021 **Doctor of Science**, *Department of Mathematical and Computing Science, Tokyo Institute of Technology*
Thesis: Difference equations arising from cluster algebras
Supervisor: Yuji Terashima and Sakie Suzuki
- Mar 2018 **Master of Science**, *Department of Mathematical and Computing Science, Tokyo Institute of Technology*
Supervisor: Yuji Terashima
- Mar 2016 **Bachelor of Science**, *Department of Information Science, Tokyo Institute of Technology*

Teaching

- Fall 2021 Part-time lecturer, Tokyo University of Agriculture and Technology, Calculus

Fellowships

- 2024–present Postdoctoral Researcher, University College Dublin
- 2021–2024 JSPS Research Fellow (PD), Japan Society for the Promotion of Sciences
- 2018–2021 JSPS Research Fellow (DC1), Japan Society for the Promotion of Sciences

Preprints

Periodic y -systems and nahm sums: the rank 2 case. *arXiv preprint arXiv:2301.13239*, 2023.

Publications

Remarks on nahm sums for symmetrizable matrices. *Ramanujan J.*, 66, 62, 2025.

q -Painlevé equations on cluster Poisson varieties via toric geometry. *Sel. Math. New Ser.*, 30, 19, 2024.

Difference equations arising from cluster algebras. *J. Algebraic Combin.*, 54(1):295–351, 2021.

Exponents associated with Y -systems and their relationship with q -series. *SIGMA Symmetry Integrability Geom. Methods Appl.*, 16:028, 42 pages, 2020.

Jacobian matrices of Y -seed mutations, *Advances in Applied Mathematics*, 115:101987, 2020.

Quiver mutation sequences and q -binomial identities, joint work with Akishi Kato and Yuji Terashima, *International Mathematics Research Notices*, 2018(23):7335–7358, 2018.