

Yuma Mizuno

Department of Mathematics and Informatics, Faculty of Science
Chiba University
1-33, Yayoicho, Inage-ku, Chiba-shi, Chiba, 263-8522 Japan
✉ ymizuno@math.s.chiba-u.ac.jp

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

- 2021–present 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

Remarks on nahm sums for symmetrizable matrices. *arXiv preprint arXiv:2305.02267*, 2023.

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

Publications

q -Painlevé equations on cluster Poisson varieties via toric geometry. *arXiv preprint arXiv:2008.11219*, to appear in *Selecta Mathematica. New Series*.

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.