Ryo ISHIZUKA | 石塚 伶

Tokyo Institute of Technology 2-12-1 Ookayama 152-8551 Meguro-ku Tokyo − Japan 3 December 1999 • ⊠ ishizuka.r.ac@m.titech.ac.jp https://ryo1203.github.io

Education

Tokyo Institute of Technology

Master of Science in Mathematics

Supervisor: Kazuma Shimomoto (2nd year), Fumiharu Kato (1st year)

Tokyo Institute of TechnologyBachelor of Science in Mathematics

Supervisor:Fumiharu Kato

Tokyo, Japan

Apr 2022-Current

Tokyo, Japan

Apr 2018–Mar 2022

Research Interests

Commutative algebra in mixed characteristic (via arithmetic methods such as perfectoid rings, prismatic cohomologies, and almost mathematics).

Preprints

- [2] R.Ishizuka. A calculation of the perfectoidization of semiperfectoid rings. arXiv:2305.07916.
- [1] **R.Ishizuka** and K.Shimomoto. A mixed characteristic analogue of the perfection of rings and its almost Cohen-Macaulay property. arXiv:2303.13872.

Talks

- o Aug 2023. "Absolute integral closure", The 18th Summer School on Commutative algebra, Tokyo Institute of Technology, Japan
- o May 2023. "On Perfectoid(ization) and its commutative ring-theoretic properties", Ookayama Algebra Seminar for Young Scientists, Tokyo Institute of Technology, Japan
- Mar 2023. "A mixed characteristic analogue of the perfection of rings", The 11th Japan-Vietnam Joint Seminar on Commutative Algebra - by and for young mathematicians -, Vietnam Academy of Science and Technology, Vietnam
- Mar 2023. "An explicit construction of perfectoid almost Cohen-Macaulay algebras in mixed characteristic", MSJ Spring Meeting 2023, Chuo University, Japan
- o Mar 2023. "An explicit construction of perfectoid almost Cohen-Macaulay algebras", The 19th Mathematics Conference for Young Researchers, Hokkaido University, Japan
- o Oct 2022. "An explicit construction of perfectoid almost Cohen-Macaulay algebras in mixed characteristic", The 43rd Japan Symposium on Commutative Algebra, Osaka University, Japan

Membership

o Apr 2023— . Mathematical Society in Japan (MSJ)

Languages

Japanese: Native Mother tangue

English: Intermediate

Can read, write, and, listen but may struggle with conversation

French: Beginner Can only read mathematical texts