Ryo ISHIZUKA | 石塚 伶

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Education

Tokyo Institute of Technology

Master of Science in Mathematics

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

Tokyo Institute of Technology

Bachelor 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.
- 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 July 2023. On the commutative ring-theoretic structure of the perfectoidization of semiperfectoid rings, The 22nd Hiroshima-Sendai Workshop on Number Theory at Hiroshima, Hiroshima University, Japan
- o July 2023. "On the application of perfectoidization to commutative algebra and its structure", The 34th Seminar on Commutative Algebra in Japan, Kitami Institute of Technology, Japan
- o May 2023. "On Perfectoid(ization) and its commutative ring-theoretic properties", Ookayama Algebra Seminar for Young Researchers, Tokyo Institute of Technology, Japan
- o 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
- o 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

Languages

Japanese:NativeMother tangueEnglish:IntermediateCan read, write, and, listen but may struggle with conversationFrench:BeginnerCan only read mathematical texts