# Wenbin Luo

*Postdoc*

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## Research interests

Arakelov geometry, diophantine approximation, dynamical systems and birational geometry

## Working experience

Jul. 2023-Now  Postdoc at Beijing International Center for Mathematical Research under the supervision of Prof. Xinyi Yuan

## Education

Apr. 2020  **Department of Mathematics, Graduate School of Science, Kyoto University, Japan**

Mar. 2023
- PhD under the supervision of Prof. Atsushi Moriwaki
- Research Fellowship for Young Scientists(DC1) of Japan Society for the Promotion of Science

Apr. 2018  **Department of Mathematics, Graduate School of Science, Kyoto University, Japan**

Mar. 2020
- Master under the supervision of Prof. Atsushi Moriwaki
- Scholarships or Awards:
  - Asian Future Leadership Scholarship

Sep. 2013 to Jun. 2017  **Department of Mathematics, Fudan University, China**
- Bachelor
- Member of Talents Project

## Publications

W. Luo, Slope boundedness and equidistribution theorem, 2022, to appear on Int. Math. Res. Not. Available: https://arxiv.org/abs/2211.08734

## Preprints

W. Luo, Arithmetic over trivially valued field and its applications, 2020. [Online]. Available: https://arxiv.org/abs/2009.08663

——, The continuity of $\chi$-volume functions over adelic curves, 2020. [Online]. Available: https://arxiv.org/abs/2003.09837

——, A relative bigness inequality and equidistribution theorem over function fields, 2021, submitted to Int. J. Number Theory. Available: https://arxiv.org/abs/2112.13206

——, Continuous extension and birational invariance of $\chi$-volume Over an Adelic Curve, 2023, submitted to J. Reine Angew. Math. Available: https://arxiv.org/abs/2303.01604

——, J. Song, Arithmetic degrees over fields of characteristic 0, 2024, submitted to Amer. J. Math. Available: https://arxiv.org/abs/2401.11982

——, Y. Fan, B. Qu , Height Filtrations and Base Loci on Flag Bundles over a Curve, 2024, submitted to Comp. Math. Available: https://arxiv.org/abs/2403.06808

## Talks and seminars

21/08/2020   **2nd Kyoto-Hefei Workshop on Arithmetic Geometry**
- Title: The continuity of $\chi$-volume over adelic curves

07/03/2022   **Seminar - New adic and algebraic directions in motivic homotopy theory**
- Title: A relative bigness inequality and equidistribution theorem over function fields

15/09/2022   **Intercity Seminar on Arakelov Geometry 2022**
- Title: A relative bigness inequality and equidistribution theorem over function fields

19/10/2022   **Kinosaki Symposium on Algebraic Geometry 2022**
- Title: A relative bigness inequality over function fields

09/01/2023   **NCTS East Asia Core Doctoral Forum in Mathematics**
- Title: Arithmetic Hilbert-Samuel and equidistribution theorems

## Teaching Experience

| Apr. 2020 - Jun. 2020 | Teaching assistant in Basics of Modern Mathematics A |
| Oct. 2020 - Jan. 2021 | Teaching assistant in Algebra II |
| Apr. 2021 - Jun. 2021 | Teaching assistant in Basics of Modern Mathematics A |
| Oct. 2021 - Jan. 2022 | Teaching assistant in Algebra II |
| Oct. 2022 - Jan. 2023 | Teaching assistant in Algebra II |