ZHIQI ZHU, 朱祉琪

Fakultät für Mathematik
Universität Duisburg-Essen
Thea-Leymann-Str. 9, 45127 Essen
Germany
[Notes]

Email: zhiqi.zhu@studenti.unipd.it
or: zhuzhiqi0730@gmail.com
Phone: +86 184 5837 7371 (CHN) or +39 324 287 3302 (IT)
blog & homepage: https://pmenom.github.io/EnHome.html

Currently I'm studying representation theory and preparing my Master thesis with Dr. Prof. Raphaël Beuzart-Plessis.

Current (Research) Interests

- **Representation Theory** and **Number Theory**, in particular Automorphic Forms, Trace Formula, Langlands correspondence,
- Harmonic Analysis.

Education

- **ALGANT** Master 2024.9 – Present
  Università di Padova (M1) and Universität Duisburg-Essen (M2, currently)
- Visiting Research Student, BIMCR, 2023.8 – 2024.6
- Enhanced program for Graduate Study (visiting research student), BIMCR, 2023.2 - 2023.7

Teaching Assistant

- Modular Forms (Graduate course), 2023.9 – 2024.12
- Mathematical Analysis III (2rd year course), 2023.9 – 2024.12
- Calculus (1st year course), 2023.9 – 2024.12
- Real Analysis (2nd year course). 2023.2 - 2023.6

Bachelor Thesis

[Local Gan-Gross-Prasad Conjecture: Tempered Hermitian Case], 2023.4 - 2024.4

In this paper, we study, following work of Beuzart-Plessis in [BP20], a geometric expansion for certain multiplicities m(\pi) appearing in the local Gan-Gross-Prasad Conjecture, and Beuzart-Plessis's proof on a weak form of this conjecture (on the multiplicity one property in tempered L-packets). In Beuzart-Plessis's proof, the crucial step is to study a sort of local relative trace formula which is related to the Gan-Gross-Prasad Conjecture for unitary groups over a local field F of characteristic zero.

Attended Mini Courses/Seminars

- Aarhus Automorphic Forms School/Conference 2025.8
- Representation Theory & Noncommutative Geometry 2025.2 – 2025.3

I join in the [Workshop 2: Tempered representations and K-theory], p-adic week and Theta correspondence week in person. Details and Personal Notes can be found [Here].

- From Modular Forms to Shimura Varieties: an introduction 2024.1
- Arizona Preliminary Winter School, Arizona (Online), 2023.9 – 2023.12

  Focus on the CM elliptic curve and class field theory of imaginary quadratic fields.
- Core topics in modern number theory, YMSC, 2022.12 - 2023.6
- 2022 Summer School on Differential Geometry, BIMCR, 2022.8
- Algebraic number theory, summer school, Nanjing University. 2022.7

Talks/Seminars Organized

- Iwasawa theory and more on number theory, 2025.1 – 2025.3
- Reps Theory on the Archimedean Place with Emphasis on GL_2, 2023.8 – 2024.4
- Algebraic Geometry and Elliptic Curves, 2022.9 – 2023.10
- Category Theory and Homological Algebra, 2023 Spring
- Lie groups and the representation theory, 2022 Spring
- Differential manifolds, differential topology, 2021 Winter

Languages

- Chinese Native
- English Working Proficiency
- Latex Working Proficiency
- French Learning

  J'ai essayé de lire quelques articles en français.