Claudius Heyer

Curriculum Vitae

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Education

Oct. 2019 – June 2024	**Postdoc**, *Universität Münster*.
Mar. 2015 – 28.06.2019	**PhD in Mathematics**, *Humboldt-Universität zu Berlin*, Title: *Applications of parabolic Hecke algebras: parabolic induction and Hecke polynomials*.
Oct. 2012 – Jan. 2015	**M. Sc. in Mathematics**, *Humboldt-Universität zu Berlin*.
Oct. 2009 – Aug. 2012	**B. Sc. in Mathematics**, *Humboldt-Universität zu Berlin*.

Positions, Fellowships

Oct. 2022 – June 2024	**Postdoc**, *Universität Münster*, no teaching load.
Oct. 2019 – Sep. 2022	**Research Assistant**, *Universität Münster*, with teaching load.
Feb. 2018 – Sep. 2019	**Berlin Mathematical School**, *Phase II (PhD student)*.
Apr. 2016 – Sep. 2019	**Research Assistant**, *Humboldt-Universität zu Berlin*, with teaching load.

Papers, Preprints

2023	****The Geometrical Lemma for Smooth Representations in Natural Characteristic***, *Preprint, submitted*, arXiv:2303.14721.
2022	****The Left Adjoint of Derived Parabolic Induction***, *Math. Z.* **305** *46(2023)*, doi:10.1007/s00209-023-03385-5.
2021	***On the Smooth Part Functor***, *Preprint*, arXiv:2108.05262.
2021	***On the Decomposition of Hecke Polynomials over Parabolic Hecke Algebras***, *J. Theor. Nombr. Bordx.* **34** *(2022) no. 3, 941–997*, doi:10.5802/jtnb.1235.
2021	***Localization of the Parabolic Hecke Algebra at a Strictly Positive Element***, *Preprint*, arXiv:2103.16949.

2021 ***Parabolic Induction via the Parabolic pro-p Iwahori–Hecke Algebra**, *Represent. Theory **25** (2021), 807–843*, doi:10.1090/ert/585.

2019 **Applications of parabolic Hecke algebras: parabolic induction and Hecke polynomials**, *Dissertation, Humboldt-Universität zu Berlin, Mathematisch-Naturwissenschaftliche Falkultät, 2019*, doi:10.18452/20137.

Research Talks

24.10.2023 **Six Functors and Smooth mod p Representations**, *Münster*, Germany, Mittagsseminar.
(Online via Zoom)

06.06.2023 **The Geometrical Lemma in Natural Characteristic**, *Wuppertal*, Germany, Oberseminar.

25.05.2023 **The Geometrical Lemma in Natural Characteristic**, *Essen*, Germany, Oberseminar.

20.01.2022 **The Left Adjoint of Derived Parabolic Induction**, *San Diego, California*, USA, UCSD Number Theory Seminar.
(Online via Zoom)

24.03.2021 **Derived Products and the Left Adjoint of Derived Parabolic Induction**, *Rennes*, France, Colloque Tournant 2021 du GDR Théorie de Lie Algébrique et Géométrique.
(Online via Zoom)

12.01.2021 **Derived Products and the Left Adjoint of Derived Parabolic Induction**, *Münster*, Germany, Mittagsseminar.

26.08.2019 **Parabolic Induction for pro-p Iwahori–Hecke Modules**, *Marseille*, France, Conference: Buildings and Affine Grassmannians.

28.05.2019 **Decomposition of Hecke Polynomials**, *Münster*, Germany, Mittagsseminar.

Conferences, Summer Schools, Workshops

Jul. 31 – Aug. 4 2023 **Summer School: The Automorphic Side of the p-adic Langlands Program**, *University of Wuppertal*, Wuppertal, Germany.

Feb. 13–17 2023 **Conference: Number Theory Meets p-Adic Representations**, *University of Münster*, Münster, Germany.

July 18–22 2022 **Focused Research Event: Smooth representations of $\mathrm{GL}(n, \mathbb{Q}_p)$ in natural characteristic**, *University of Oxford*, Oxford, United Kingdom.

Mar. 16–18 2022 **Workshop: Higher Algebra**, *TU Darmstadt*, Darmstadt, Germany.

Sep. 27 – Oct. 1 2021	**Conference: Representation Theory's Hidden Motives**, *University of Münster*, Münster, Germany.
Apr. 26–30 2021	**Spring School towards a mod p Langlands correspondence**, *Essen*, (Online via Zoom).
Mar. 24–26 2021	**Colloque Tournant 2021 du GDR Théorie de Lie Algébrique et Géométrique**, *University of Rennes 1*, (Online via Zoom).
Aug. 26 – Sep. 6 2019	**Conference: Buildings and Affine Grassmannians**, *CIRM, Marseille, France*.
June 3–7 2019	**Conference: Representation Theory and D-Modules**, *University of Rennes 1, Rennes, France*.
Oct. 8–11 2018	**CENTRAL Workshop: Automorphic Techniques in Arithmetic Geometry**, *Humboldt-Universität zu Berlin, Berlin, Germany*.
Sep. 2–8 2018	**Autumn School: Arithmetic of Differential Equations**, *Łukęcin, Poland*.

Teaching experience

WS 2023/24	**Organizer**, *University of Münster*, Reading seminar: cuspidal representations of $\mathrm{GL}_2(F)$ for $F/\mathbb{Q}_p$ finite, Co-Organizer: Prof. Dr. Eugen Hellmann.
SS 2023	**Lecturer**, *University of Münster*, Smooth Representations of p-Adic Groups.
WS 2022/23	**Organizer**, *University of Münster*, Mittagsseminar.
SS 2022	**Teaching Assistant**, *University of Münster*, Introduction to Algebra, Lecturer: Prof. Dr. Eva Viehmann.
WS 2021/22	**Teaching Assistant**, *University of Münster*, Reflection Groups and Platonic Solids, Lecturer: apl. Prof. Dr. Lutz Hille.
SS 2021	**Organizer**, *University of Münster*, Oberseminar: Classification of Smooth mod p Representations.
SS 2021	**Teaching Assistant**, *University of Münster*, Galois Representations and (φ, Γ)-Modules, Lecturer: Prof. Dr. Peter Schneider.
WS 2020/21	**Teaching Assistant**, *University of Münster*, Local Galois Representations, Lecturer: Prof. Dr. Peter Schneider.
SS 2020	**Organizer**, *University of Münster*, Seminar: Finite Hecke Algebras, Co-Organizer: Prof. Dr. Peter Schneider.
SS 2020	**Organizer**, *University of Münster*, Oberseminar: Towards Eigenvarieties.
WS 2019/20	**Assistant**, *University of Münster*, Seminar: Mathematical Learning and Reflection, Main Instructor: PD Dr. Christian Serpé.
SS 2019	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Algebra/Number Theory and its Didactics, Lecturer: Prof. Dr. Elmar Große-Klönne.

WS 2018/19	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Algebra and Complex Analysis, Lecturer: Prof. Dr. Elmar Große-Klönne.
SS 2018	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Linear Algebra and Analytic Geometry II*, Lecturer: Prof. Dr. Elmar Große-Klönne.
WS 2017/18	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Linear Algebra and Analytic Geometry I*, Lecturer: Prof. Dr. Elmar Große-Klönne.
SS 2017	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Algebra and Number Theory, Lecturer: Dr. Daniel Skodlerack.
WS 2016/17	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Linear Algebra and Analytic Geometry I, Lecturer: Dr. Claudia Schillings.
SS 2016	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Algebra and Number Theory, Lecturers: Dr. Werner Kleinert and Dr. Frank Gounelas.
WS 2015/16	**Teaching Assistant**, *Humboldt-Universität zu Berlin*, Linear Algebra I (for Computer Scientists), Lecturer: Dr. Bernhard Gerlach.

Languages

German	native
English	fluent
French	basic

Claudius Heyer
Münster, October 24, 2023