

Personal information

Last name	Frey, née Raabe
First names	Linda Karina
E-Mail	Linda.Frey89@gmail.com
Website	www.lorifan.de
YouTube Channel	www.youtube.com/c/LindaFrey
Date of birth	23.05.1989
Civil status	Married, four children (*07/2013, *01/2015, *06/2019, *03/2021)

Education and Research Positions

04/2022 to 09/2023 Universität Göttingen Germany	part-time (75 %) researcher position. PostDoc mentor: Prof. Dr. Preda Mihailescu
10/2018 to 09/2021 University of Copenhagen Denmark	early PostDoc.mobility grant (SNF). PostDoc mentor: Prof. Dr. Fabien Pazuki working on heights and Igusa invariants
04/2015 to 06/2018 Universität Basel Switzerland	PhD in mathematics, researcher position. Advisor: Prof. Dr. Philipp Habegger Title "Height Lower Bounds in some non-Abelian Extensions", defended with "magna cum laude" on June 21st 2018
04/2013 to 03/2015 TU Darmstadt Germany	PhD in mathematics, researcher position. Advisor: Prof. Dr. Philipp Habegger Working title "Heights and elliptic curves"
09/2012 to 03/2013 Universität Frankfurt Germany	PhD in mathematics, researcher position. Advisor: Prof. Dr. Philipp Habegger Working title "Heights and elliptic curves"
09/2011 to 10/2012 ETH Zürich Switzerland	Master of Science ETH in mathematics Master Thesis "Kummer theory on elliptic curves", Advisor: Prof. Dr. Emmanuel Kowalski final grade 5,33 (6: best, 1: worst)
04/2008 to 07/2011 Universität Mainz Germany	Bachelor of Science in mathematics Bachelor Thesis "Freyd-Mitchellscher Einbettungssatz" Advisor: Prof. Dr. Manuel Blickle final grade 2,0 (1: best, 5: worst)

Awards, Grants and Fellowships

10/2018 to 08/2021 early PostDoc.mobility	Full research stipend of the Swiss National Science Foundation, worth 190.000 CHF
06/2018 Birkhäuser Prize	Award for the best talk in the Swiss Graduate Colloquium 2018
02/2017 to 11/2017 antelope@university	Program of the Universität Basel for highly qualified female PhD students, worth 7.500 CHF (see www.unibas.ch/antelope)
07/2017 to 12/2017 get on track	Liberation of teaching duties, worth 6.000 CHF (see www.unibas.ch/getontrack)
03/2008 Abiturpreis Mathematik	Award of the DMV for an outstanding written exam (highest grade) in the final exams at high school

Peer-reviewed Publications

2021	Linda Frey - Explicit Small Heights for Infinite Non-Abelian Extensions, Acta Arithmetica 199 (2021), no.2, 111-133
2021	accepted for publication in Ann. Sc. Norm. Super. Pisa Cl. Sci. (5)23(2022), no.3, 1357–1393 , Linda Frey - Small Heights for Non-Abelian Extensions

Preprints and work in progress

2024	preprint, Linda Frey, Elisa Lorenzo García, Samuel Le Fourn - Explicit height estimates for CM curves of genus 2
2024	preprint, John Cullinan, Shanna Dobson, Linda Frey, Asimina Hamakiotes, Roberto Hernandez, Nathan Kaplan, Jorge Mello, and Gabrielle Scullard - The probability of non-isomorphic group structures of isogenous elliptic curves in finite field extensions, II
2023	accepted for publication in Women in Numbers Europe 4 Proceedings, Marta Dujella, Anne-Maria Ernvall-Hytönen, Linda Frey, Bidisha Roy - Transcendence measures for $e^{\frac{1}{n}}$
tbd	in preparation, Mohamed Nour Elislam Belkacem, Linda Frey, Laid Kahloul, Saber Benharzallah, Samir Tigane, Nadia Hamani - A Blockchain-based Decentralized Approach for Data Integrity in Transformative Computing

Invited Talks

2022	Aalto University, Finland - cancelled because of covid
2019	Göteborg, Sweden Universität zu Köln, Germany Charmey, Switzerland
2018	Université de Rennes, France University of Bristol, United Kingdom Universität Mainz, Germany TU Darmstadt, Germany The Hebrew University of Jerusalem, Israel Institut Fourier Grenoble, France Université de Caen Normandie, France University of Copenhagen, Denmark
2017	University of Cape Town, South Africa Stellenbosch University, South Africa Stellenbosch University, South Africa
2016	Charmey, Switzerland
2014	Université de Bordeaux, France

Teaching Activities

2022-2023 University of Göttingen Germany	Algebraic Number Theory (lecture , 2 hours per week, Master level) Linear Algebra I (exercise lessons) Diskrete Mathematik (exercise lessons, Bachelor level)
2018-2021 University of Copenhagen Denmark	Topics in Number Theory (lecture , 4 hours per week, Master/PhD level)
2015-2018 Universität Basel Switzerland	Elliptische Kurven II (exercise lessons and sometimes substitution of the lecturer) Seminar for gifted high school students (twice) Lineare Algebra II (twice) (exercise lessons and youtube videos)
2013-2014 TU Darmstadt Germany	Seminar Kategorientheorie Co-supervised Bachelor's theses
2012-2013 Universität Frankfurt Germany	Seminar Höhentheorie
2011-2012 ETH Zürich Switzerland	Linear Algebra I (exercise lessons) Grundlagen der Mathematik II (exercise lessons)
2009-2011 Universität Mainz Germany	Mathematik für Informatiker I (exercise lessons) Lineare Algebra I (twice) (exercise lessons) Lineare Algebra II (exercise lessons)

(Organized) Conferences and Research Visits

- 2022 *Conference on Arithmetic Algebraic Geometry*, Darmstadt, Germany
Women in Arithmetic Geometry, Heidelberg, Germany
Women in Numbers Europe 4, Utrecht, Netherlands
28th Nordic Congress of Mathematicians, Espoo, Finland (**speaker**) - cancelled because of covid
- 2019 *N cube days*, Göteborg, Sweden (**plenary speaker**)
Topics in Rational Points (conference), Basel, Switzerland
Topics in Rational Points (summer school), Basel, Switzerland
Curves and Groups in Families, Rennes, France
5th Mini Symposium of the Roman Number Theory Association, Rome, Italy (**speaker**)
goMATH symposium, Zürich, Switzerland
8th Swiss-French workshop on algebraic geometry, Charmey, Switzerland (**speaker**)
- 2018 *N cube days*, Lund, Sweden
FUNference in honor of Philipp Habegger's 40th birthday, Basel, Switzerland (organizer)
Galois Representations and Heights, Alpbach, Austria
Torsion Subgroups and Galois Representations of Elliptic Curves, Zagreb, Croatia (**speaker**)
Swiss Graduate Colloquium, Basel, Switzerland (**speaker and award winner**)
Number Theory Days, Basel, Switzerland
4th Mini Symposium of the Roman Number Theory Association, Rome, Italy
7th Swiss-French workshop on algebraic geometry, Charmey, Switzerland
- 2017 Research visit with Florian Breuer, Stellenbosch, South Africa
Specialization Problems in Diophantine Geometry, Cetraro, Italy
Number Theory Days, Lausanne, Switzerland
Arithmetic of Function Fields, Münster, Germany
6th Swiss-French workshop on algebraic geometry, Charmey, Switzerland (**speaker**)
- 2016 *Leuca2016 Celebrating Michel Waldschmidt's 70th birthday*, Leuca, Italy
5th Swiss-French workshop on algebraic geometry, Charmey, Switzerland (**speaker**)
- 2014 *Colloque Jeunes Chercheurs en Théorie des Nombres*, Bordeaux, France (**speaker**)
- 2013 Research visit at the Institute of Advanced Study, Princeton, USA

Other employment history

06/2010 to 08/2011	Private tutoring of university students in mathematics
08/2011 to 08/2011	Substitute teacher at Alte Kanti Aarau (senior classes)
04/2002 to 04/2011	Private tutoring of high school students (all subjects and all levels)

Career Breaks

2023/2024	campaigning for becoming mayor of Mühltal (5 months)
2021/2022	Parental leave fourth child (6 months)
2021	Maternity leave fourth child(5 months)
2020	Accident (broken arm, 2 months)
2020	Corona leave due to lack of child care (2 months)
2019/2020	Maternity leave third child (7 months)
2015/2016	Accident (broken knee, 11 months)
2014/2015	Maternity leave second child (7 months)
2013	Maternity leave first child (5 months)

Voluntary Activities

2023/2024	candidate for mayor in Mühltal
since 2021	chairwoman of Grüne Mühltal
since 2021	member of the local parliament, vice chairwoman of the parliament, chairwoman of the Haupt- und Finanzausschuss