CONTACT INFO
Doc. Mgr. Vítězslav Kala, Ph.D., DSc.
Charles University
Faculty of Mathematics and Physics
Sokolovská 83
18675 Praha
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PERSONAL
Born August 8, 1985. Married, 2 daughters. Nationality Czech Republic.

RESEARCH INTERESTS
Broadly interested in number theory (algebraic and analytic), algebra, and logic.
Specifically:
- Universal quadratic forms, arithmetic of number fields, distribution of class numbers, generalized continued fractions
- Langlands program, applications of model theory, simple semifields

WORK

Charles University, Prague, Czech Republic
Faculty of Mathematics and Physics, Department of Algebra
Associate Professor **01/2022–present**
Assistant Professor **01/2017–12/2021**
Postdoc **09/2015–06/2016**

University of Göttingen, Germany
Postdoc **01/2015–08/2017**
- Mentor: Valentin Blomer
- Partly supported by V.B.'s ERC Starting Grant

Max Planck Institute for Mathematics, Bonn, Germany
Postdoc **09/2014–12/2014**

ADVANCED DEGREES

Czech Academy of Sciences, Prague, Czech Republic
DSc., Research professor thesis *Arithmetic of small elements in totally real fields* **2026**

Charles University, Prague, Czech Republic
Doc., Habilitation thesis *Universal quadratic forms over number fields* **2021**

EDUCATION

Purdue University, West Lafayette, Indiana, USA
Ph.D., Mathematics **2009–2014**
- Advisor: Freydoon Shahidi
- Thesis: *Density of self-dual automorphic representations of* $GL_n(\mathbb{A}_{\mathbb{Q}})$

Charles University, Prague, Czech Republic
Ph.D., Mathematics (in absentia) **2009–2013**
- Advisor: Tomáš Kepka
- Thesis: *Algebraic substructures in* $\mathbb{C}^m$

Mgr. (Master's), Mathematics **2007–2009**
- Summa cum Laude, Commencement speaker

Bc. (Bachelor's), Mathematics **2004–2007**
- Summa cum Laude

GRANTS, AWARDS

Czech Science Foundation GAČR **2026–2028**
- PI of *Sailing to criterion sets for quadratic forms* grant
- Selective Standard project (success rate 14%)
- 3 team members supported, total budget 440 000 EUR

Czech Science Foundation GAČR **2021–2025**
- PI of *UFOCLAN: Universal quadratic forms and class numbers* grant
- Highly selective Junior Star project (success rate 9%)
- 11 postdocs supported, total budget 940 000 EUR

Primus Research Programme **2020–2022**
- PI of research grant *Universal quadratic forms: geometry and analysis*
- 4 postdocs supported, total budget 240 000 EUR

Czech Science Foundation GAČR **2017–2019**
- PI of Junior Grant *Quadratic forms and numeration systems over number fields*
- 3 postdocs supported, total budget 260 000 EUR
- Outcomes of the grant evaluated by the grant agency as excellent
- Nominated for GAČR President's award in physical sciences (as best project in math)

Neuron Impulse **2018–2019**
- PI of grant *Semifields in number theory and geometry*

Bolzano Award **2019**
- Annual award of the Bernard Bolzano Endowment Fund for the best research in mathematics, for *Universal quadratic forms and families of number fields*

International Fulbright Science and Technology Award **2009–2012**
- For international PhD students at prestigious universities in the USA
- Only 40 students worldwide selected each year

Mathematical Competitions
- 1st Prize: International Mathematical Competition 2006, 2008
- 1st Place: Vojtěch Jarník International Mathematical Competition 2009
- Bronze Medal: International Mathematical Olympiad 2004

ARTICLES

5 of my best recent papers are highlighted in ***bold****.*

Submitted

[51] V. Kala, R. Roy, *The addition on totally positive integers uniquely determines the totally real number field*, 15 pp., submitted

[50] V. Kala, O. Prakash, *There are consecutive cubic fields with large class numbers, when ordered by discriminant*, 10 pp., submitted

[49] V. Kala, J. Krásenský, D. Park, P. Yatsyna, B. Żmija, *Kitaoka's Conjecture for quadratic fields*, 27 pp., submitted

Accepted

[48] V. Kala, P. Yatsyna, B. Żmija, ***Real quadratic fields with a universal quadratic form of given rank have density zero***, Amer. J. Math. (to appear), 18 pp.

[47] V. Kala, P. Yatsyna, *Even better sums of squares over quintic and cyclotomic fields*, Rev. Mat. Complut. (to appear), 22 pp.

Published

[46] V. Kala, K. Kramer, J. Krásenský, *Kitaoka's Conjecture and sums of squares*, Bull. Lond. Math. Soc. 58 (2026), article e70445, 21 pp.

[45] V. Kala, J. Krásenský, G. Romeo, ***Universality criterion sets for quadratic forms over number fields***, Adv. Math. 500 (2026), article 111080, 27 pp.

[44] V. Kala, D. Kim, S. H. Lee, *Universality lifting from a general base field*, Rev. Mat. Iberoam. 41 (2025), 2379–2400

[43] N. Daans, V. Kala, S. H. Man, P. Yatsyna, M. Widmer, ***Most totally real fields do not have universal forms or the Northcott property***, Proc. Natl. Acad. Sci. USA 122 (2025), article e2419414122, 8 pp.
[42] N. Daans, V. Kala, J. Krásenský, P. Yatsyna, *Failures of integral Springer's Theorem*, Proc. Amer. Math. Soc. 153 (2025), 2369–2379
[41] V. Kala, E. Sgallová, M. Tinková, *Arithmetic of cubic number fields: Jacobi–Perron, Pythagoras, and indecomposables*, J. Number Theory 273 (2025), 37–95

[40] V. Kala, S. H. Man, ***Sails for universal quadratic forms***, Selecta Math. (N.S.) 31 (2025), article 26, 31 pp.
[39] N. Daans, V. Kala, S. H. Man, ***Universal quadratic forms and Northcott property of infinite number fields***, J. Lond. Math. Soc. 110 (2024), article e70022, 20 pp.
[38] V. Kala, O. Prakash, *There is no* 290*-Theorem for higher degree forms*, Math. Nachr. 297 (2024), 4322–4332
[37] H. Řada, Š. Starosta, V. Kala, *Periodicity of general multidimensional continued fractions using repetend matrix form*, Expo. Math. 42 (2024), article 125571, 36 pp.
[36] V. Kala, L. Šíma, *On minimal semiring generating sets of finitely generated commutative parasemifields*, Algebra Universalis 85 (2024), article 24, 19 pp.

[35] V. Kala, M. Melistas, *Universal quadratic forms and Dedekind zeta functions*, Int. J. Number Theory 20 (2024), 1833–1847
[34] V. Kala, M. Zindulka, *Partitions into powers of an algebraic number*, Ramanujan J. 64 (2024), 537–551
[33] V. Kala, T. Kepka, M. Korbelář, *Congruence-simple matrix semirings*, Internat. J. Algebra Comput. 34 (2024), 407–424
[32] V. Kala, P. Miska, *On continued fraction partial quotients of square roots of primes*, J. Number Theory 253 (2023), 215–234
[31] G. Cherubini, A. Fazzari, A. Granville, V. Kala, P. Yatsyna, *Consecutive real quadratic fields with large class numbers*, Int. Math. Res. Not. IMRN (2023), 12052–12063

[30] V. Kala, *Universal quadratic forms and indecomposables in number fields: A survey*, Commun. Math. 31 (2023), Special issue: Euclidean lattices: theory and applications, 81–114
Won *Communications in Mathematics Best Paper Award 2026*
[29] V. Kala, P. Yatsyna, *On Kitaoka's conjecture and lifting problem for universal quadratic forms*, Bull. Lond. Math. Soc. 55 (2023), 854–864
[28] V. Kala, *Number fields without universal quadratic forms of small rank exist in most degrees*, Math. Proc. Cambridge Philos. Soc. 174 (2023), 225–231
[27] V. Kala, M. Tinková, *Universal quadratic forms, small norms and traces in families of number fields*, Int. Math. Res. Not. IMRN (2023), 7541–7577
[26] T. Hejda, V. Kala, *Ternary quadratic forms representing a given arithmetic progression*, J. Number Theory 234 (2022), 140–152

[25] V. Kala, P. Yatsyna, *Lifting problem for universal quadratic forms*, Adv. Math. 377 (2021), article 107497, 24 pp.
[24] V. Kala, P. Yatsyna, *Sums of squares in S-integers*, New York J. Math. 26 (2020), 1145–1154
[23] T. Hejda, V. Kala, *Additive structure of totally positive quadratic integers*, Manuscripta Math. 163 (2020), 263–278
[22] V. Kala, J. Svoboda, *Universal quadratic forms over multiquadratic fields*, Ramanujan J. 48 (2019), 151–157
[21] V. Kala, T. Vávra, *Periodic representations in algebraic bases*, Monatsh. Math. 188 (2019), 109–119

[20] V. Kala, M. Korbelář, *Idempotence of finitely generated commutative semifields*, Forum Math. 30 (2018), 1461–1474
[19] A. Dahl, V. Kala, *Distribution of class numbers in continued fraction families of real quadratic fields*, Proc. Edinb. Math. Soc. 61 (2018), 1193–1212

[18] V. Blomer, V. Kala, *On the rank of universal quadratic forms over real quadratic fields*, Doc. Math. 23 (2018), 15–34
[17] P. Glivický, V. Kala, *Fermat's Last Theorem and Catalan Conjecture in weak exponential arithmetics*, Math. Log. Quart. 63 (2017), 162–174
[16] V. Kala, *Semifields and a theorem of Abhyankar*, Comment. Math. Univ. Carolin. 58 (2017), 267–273

[15] V. Kala, *Lattice-ordered abelian groups finitely generated as semirings*, J. Commut. Algebra 9 (2017), 387–412
[14] V. Kala, *Norms of indecomposable integers in real quadratic fields*, J. Number Theory 166 (2016), 193–207
[13] V. Kala, *Universal quadratic forms and elements of small norm in real quadratic fields*, Bull. Aust. Math. Soc. 94 (2016), 7–14
[12] V. Blomer, V. Kala, *Number fields without universal n-ary quadratic forms*, Math. Proc. Cambridge Philos. Soc. 159 (2015), 239–252
[11] J. Berg, A. Castillo, R. Grizzard, V. Kala, R. Moy, C. Wang, *Congruences for Ramanujan's f and omega functions via generalized Borcherds products*, Ramanujan J. 35 (2014), 327–338

[10] J. Ježek, V. Kala, T. Kepka, *Finitely generated algebraic structures with various divisibility conditions*, Forum Math. 24 (2012), 379–397
[9] V. Kala, M. Korbelář, *Congruence simple subsemirings of* $\mathbb{Q}+$, Semigroup Forum 81 (2010), 286–296
[8] A. Drápal, C. Hämäläinen, V. Kala, *Latin bitrades, dissections of equilateral triangles, and abelian groups*, J. Comb. Des. 18 (2010), 1–24
[7] V. Kala, T. Kepka, P. Němec, *Norms on semirings I.*, Acta Univ. Carolin., Math. Et Phys. 51 (2010), 29–48
[6] V. Kala, T. Kepka, *Commutative parasemifields finitely generated as semirings*, Acta Univ. Carolin., Math. Et Phys. 51 (2010), 49–56

[5] V. Kala, T. Kepka, M. Korbelář, *Notes on commutative parasemifields*, Comment. Math. Univ. Carolin. 50 (2009), 521–533
[4] V. Kala, A. D. Keedwell, *Addendum to The existence of Buchsteiner and conjugacy-closed quasigroups*, Europ. J. Combin. 30 (2009), 1386
[3] V. Kala, T. Kepka, M. Korbelář, J. D. Phillips, *Various subsemirings of the field* $\mathbb{Q}$ *of the rational numbers*, Acta Univ. Carolin., Math. Et Phys. 50 (2009), 29–59
[2] V. Kala, T. Kepka, *A note on finitely generated ideal-simple commutative semirings*, Comment. Math. Univ. Carolin. 49 (2008), 1–9
[1] V. Flaška, A. Jančařík, V. Kala, T. Kepka, *Trees in commutative nil-semigroups of index two*, Acta Univ. Carolin., Math. Et Phys. 48 (2007), 81–101

Teaching

Charles University, Czech Republic
♠: *Dean's teaching award for all my courses in a given academic year (total* 2 *times)*
♡: *Dean's teaching award for an individual course (total* 4 *times)*

2nd year Bachelor's lectures
- Algebra, Spring 2021, 2024, 2027
- Number theory, Spring 2009, 2018, 2019, 2020 ♡, 2022 ♠, 2023 ♠, 2025

3rd year Bachelor's lectures
- Introduction to commutative algebra, Fall 2017 ♡, 2018, 2019 ♡, 2022 ♠, 2024, 2025
- Introduction to group theory, Fall 2021 ♠

Master's lectures
- Algebraic number theory, Spring 2018, 2019, 2021, 2025, 2026
- Quadratic forms and class fields, Fall 2015, 2018 ♡, Spring 2011, 2016, 2019
- Modular forms and L-functions, Fall 2017, 2019, Spring 2018

8 recitation classes (on number theory and algebra), 2006–2009

University of Göttingen, Germany
- Analytic Number Theory I (assistant), Winter 2016

Purdue University, USA
- Introductory Analysis I (business calculus course), Spring 2013, 2014

Service

- Chair of the evaluation panel *Mathematics and Computer Science*, Czech Science Foundation, 2023–2025 (previously vice chair 2021–2023)
- Chair of the *Committee of programs for the support of science at Charles University* for *Natural Sciences, Mathematics, and Computer Science* (evaluating grant proposals), from 2024 (previously member 2023)
- Member of a grant evaluation committee of Czech Academy of Sciences, from 2026
- Member of the *Cooperatio* advisory board for mathematics, Charles University, from 2022
- Member of the *Academic Senate* of the Faculty of Mathematics and Physics, Charles University, 2026–2028, 2020–2023
- Editorial board member of *Int. J. Number Theory* (from 2025), *Open Math.* (2024–2026), *Comment. Math. Univ. Carolin.* (from 2021), *Commun. Math.* (from 2026), *Integers* (from 2026)
- Organizer of the conference *Quadratic Lattices in Prague* (2026)
- Founder and Organizer of the *Number Theory Seminar* (from 2015), *Algebra Colloquium* (2021–2022), and *Mathematical Forum* (from 2023) at Charles Univ.
- Referee of > 40 articles, e.g., for *Adv. Math., Bull. Lond. Math. Soc., Comment. Math. Helvet., Intern. Math. Res. Not. IMRN, Math. Z., Rev. Math. Complut., Trans. Amer. Math. Soc.*
- External Ph.D. thesis referee for *University of Salerno* (Italy) and *Harish–Chandra Research Institute* (India, 2×)
- External tenure track referee for *Texas A&M University–San Antonio* (USA)
- External grant reviewer for *National Science Centre Poland*
- Reviewer for *Mathematical Reviews*
- Editorial board member of *Pokroky matematiky, fyziky a astronomie* (Advances in mathematics, physics, and astronomy), Czech popularization journal, from 2019
- *Graduate Representative* in the Mathematics Dept. at Purdue University, 2012–2013
- Vice president and Mentor of the *Purdue Fulbright Association*, 2011, 2012
- Popularization: Regular popular talks for high school students at various venues
- Organizer of math competitions (correspondence seminars) and camps for middle- and high-school students, 2001–2009

Postdocs

- Siu Hang Man, 09/2022–12/2028
- Martí Oller Riera, 09/2026–08/2028
- Matteo Bordignon, 01/2022–01/2023
  next job: postdoc at KTH Stockholm
- Giacomo Cherubini, 09/2020–10/2022
  next job: permanent position at Sapienza University of Rome
- Nicolas Daans, 01/2023–12/2023
  next job: postdocs at KU Leuven and University of Mons
- Alessandro Fazzari, 09/2021–12/2021
  next job: postdoc at American Institute of Mathematics
- Stevan Gajović, 03/2023–12/2024
  next job: postdoc at MPIM Bonn
- Daniel Gil Muñoz, 08/2021–06/2023
  next job: postdoc at University of Barcelona

- Tomáš Hejda, 01/2017–12/2019
  next job: work for Overleaf
- Mentzelos Melistas, 01/2023–08/2023
  next job: tenure track lecturer at University of Twente
- Dayoon Park, 03/2024–09/2025
  next job: postdoc at UNIST
- Subham Roy, 08/2024–06/2025
  next job: another position at Charles University
- Eric Stucky, 08/2021–08/2022
  next job: adjunct faculty member at Champlain College
- Tomáš Vávra, 01/2017–12/2019, 05/2020–08/2020
  next job: postdoc at University of Waterloo
- Pavlo Yatsyna, 01/2020–08/2022
  next job: postdoc at Aalto University
- Ezra Waxman, 08/2018–07/2019
  next job: postdoc at Dresden University with Minerva Fellowship
- Jongheun Yoon, 01/2025–08/2025
  next job: postdoc at Seoul National University
- Błażej Żmija, 10/2021–06/2023
  next job: postdoc at Polish Academy of Sciences, and faculty at AGH University Krakow

STUDENTS

Ph.D.

- Om Prakash, *Representations of algebraic integers by higher degree forms* (from 2023)
- Ritoprovo Roy, *Additive problems in algebraic integers and lattices* (from 2025)
- Mikuláš Zindulka, *Arithmetics of number fields: partitions, norms, and quadratic forms* (2021–2025)
  next job: postdoc at University of Hong Kong
- Jakub Krásenský, *Universal quadratic forms over orders in number fields* (2018–2023)
  Elected member of European Mathematical Young Academy
  next job: tenure-track faculty at Czech Technical University, Prague
- Magdaléna Tinková, *Arithmetics of number fields and generalized continued fractions* (2017–2021)
  Josef Hlávka Award
  next jobs: tenure-track faculty at Czech Technical University, Prague; and postdoc at TU Graz supported by Czech Science Foundation grant

Master's

- Veronika Jarrahová, *Short vectors in integral lattices* (2025)
- Matěj Doležálek, *Quaternion orders and quadratic forms* (2024)
- Martin Raška, *Geometry of multidimensional continued fractions* (2024)
- Martin Kuděj, *Semilattices and indecomposable elements* (2024)
- Bára Tížková, *Adeles and class fields* (2023)
- Sára Vyhnalová, *Ideal lattices in cryptography* (co-advised by P. Yatsyna, 2021)
- Kristína Mišlanová, *Quaternion algebras and units* (2021)
- Lucien Šíma, *Finitely generated semirings and semifields* (2021)
- Ester Sgallová, *Periodicity of Jacobi-Perron algorithm* (co-advised by M. Tinková, 2021)
  2nd place in SVOČ research competition
- Pavel Surý, *Local-global principle for quadratic forms* (2020)
- Martin Čech, *Pretentious approaches in analytic number theory* (2018)
- Kristýna Zemková, *Composition of quadratic forms over number fields* (2018)
  Dean's prize for best thesis; 3rd place in SVOČ research competition
- Dominik Lachman, *Bruhat-Tits buildings* (2017)
  Dean's prize for best thesis; 1st place in SVOČ research competition
- Jakub Hlavnička, *Products of primes in arithmetic sequences and prime number theorem*,

Czech Technical University, Master's project (2015) and thesis (2016)
- Maroš Hrnčiar, *Solving diophantine equations by factorization in number fields* (2015)

Bachelor's
- Kryštof Pravda, *Chebotarev density theorem and real roots of polynomials* (co-advised by S. Roy, from 2024)
- Jakub Šošovička, *Continued fraction period lengths of square roots* (2026)
  2nd place in SVOČ research competition
- Tereza Trusková, *Finitely generated abelian groups and kernel-image algorithm* (2026)
- Arina Beck, *Class numbers of orders in real quadratic fields* (2025)
- Veronika Borková, *Northcott property and values of quadratic forms* (2025)
- Markéta Laciková, *Continued fractions and best signed approximations* (2025)
- Tomáš Sklenář, *Proving combinatorial identities via formal power series* (co-advised by S. H. Man, 2024)
- Natália Bátorová, *Arithmetic-geometric mean sequences and elliptic curves over finite fields* (co-advised by S. Gajović, 2024)
- Jan Kotyk, *Congruent numbers, elliptic curves, and L-functions* (co-advised by S. Gajović, 2024)
- Žaneta Lipertová, *Non-unique factorization in number fields* (2024)
- Emma Pěchoučková, *Conway's topograph* (2024)
- Anna Růžičková, *Two-dimensional integer trigonometry* (co-advised by M. Raška, 2024)
- František Couf, *Fourier transform on polytopes and tiling with rectangles* (co-advised by M. Zindulka, 2023)
- Simona Hlavinková, *The structure of generalized Pythagorean triples* (2023)
- Veronika Jarrahová, *Cyclotomic extensions and the Kronecker–Weber theorem* (2023)
- Filip Kucka, *RSA in number fields and on lattices* (2023)
- David Stern, *Partitions of totally positive elements in real quadratic fields* (co-advised by M. Zindulka, 2023)
- Matěj Doležálek, *Subfields of number field extensions and quadratic forms* (2022)
  3rd place in SVOČ research competition
- Daniela Lněničková, *Geometric solution of quadratic diophantine equations* (2022)
- Martin Raška, *Sums of squares in number fields* (2021)
  Dean's prize for best thesis; Honor. mention in SVOČ research compet.
- Bára Tížková, *Universal quadratic forms and estimates of traces of algebraic integers* (2021)
- Ondrej Bínovský, *Imaginary quadratic fields with class number 1* (2021)
- Matěj Doležálek, *Quaternions and universal quadratic forms over number fields* (2021, unofficial research project)
  Award of The Learned Society of the Czech Republic
  1st place in SVOČ research competition
- Alexandr Beneš, *Counting extensions of imaginary quadratic fields* (2020)
  Dean's prize for best thesis
- Veronika Hájková, *Pythagoras numbers of orders in number fields* (2020)
- Martin Kuděj, *Continued fractions with prescribed period* (2020)
- Kateřina Bžatková, *Visibly irreducible polynomials* (2019)
- Kristína Mišlanová, *Matrix of Legendre symbols* (2019)
- Sára Vyhnalová, *Solovay-Strassen primality test* (2019)
- Anh Dung Le, *Bernoulli numbers and ideal class groups* (2017)
- Martin Čech, *Algebraic proofs of Dirichlet's theorem on arithmetic progressions* (2016)
- Josef Svoboda, *Universal quadratic forms over number fields* (2016)

High School
- Lukáš Koucký, *Coefficients of continued fractions and Gauss–Kuzmin statistics* (2026)
- Veronika Menšíková, Helena Muchová, *Using continued fractions with prescribed period for universal quadratic forms* (2025)

- Matěj Doležálek, *Quaternions and generalizations of 4-square theorem* (2019)
  České hlavičky award; 1st place in SOČ research competition
- Matěj Doležálek, *The congruent number problem* (2018)

TALKS

Invited conference and seminar talks

- *Consecutive real quadratic and cubic fields with large class numbers*, Intern. Conf. on Class Groups of Number Fields and Related Topics, IIT Guwahati, India; October 9, 2026
- *Universal quadratic forms and Northcott property of infinite number fields*; Rényi Institute Colloquium, Budapest, Hungary; April 20, 2026
- *Consecutive real quadratic and cubic fields with large class numbers*; Number Theory Seminar, Rényi Institute, Budapest, Hungary; April 21, 2026
- *Using geometric continued fractions for universal quadratic forms*; One World Numeration Seminar, online; April 7, 2026
- *Universal quadratic lattices and Northcott property of infinite number fields*, Weihnachtsworkshop on Geometry and Number Theory, Karlsruhe, Germany; December 16, 2025
- *Universal quadratic forms and Northcott property of infinite number fields*; Conf. Arithmetic Theory of Quadratic Forms and Lattices, Seoul National U., Korea; June 10, 2025
- *Universal quadratic forms and the lifting problem*, Recent advances in Mathematics and related areas, SRM University AP, India; January 16, 2025
- *Lifting problem for universal quadratic forms*, 8th Number Theory Meeting, Torino, Italy, September 19, 2024
- *Universal quadratic forms and Northcott property of infinite number fields*; N-cube Days XX, Tromsø, Norway; May 29, 2024
- *Universal quadratic forms and Northcott property of infinite number fields*; Seminar on Arithmetic Geometry and Algebraic Groups; online; October 26, 2023
- *Universal quadratic forms and Northcott property of infinite number fields*; ANTA Seminar; Aalto University, Finland; September 28, 2023
- *Consecutive real quadratic fields with large class numbers*; International Conference on Class Groups of Number Fields and Related Topics, KSoM, India; November 22, 2022
- *Lifting problem for universal quadratic forms*; Number Theory Seminar; Krakow, Poland (online talk); November 3, 2022
- *Universal quadratic forms and indecomposables in number fields* (6 hours of lectures); XXIII Internat. Workshop for Young Mathematicians, Krakow, Poland; September 11–17, 2022
- *Universal quadratic forms over number fields*; International Conference on Class Groups of Number Fields and Related Topics, KSoM, India (online talk); October 24, 2021
- *Universal quadratic forms over number fields*; Number Theory Lunch Seminar, MPIM Bonn, Germany; March 3, 2020
- *Introduction to L-functions and Langlands program* (two plenary lectures); 57th SSAOS, Czechia; September 5 and 6, 2019
- *Universal quadratic forms over number fields*; Prague–Dresden Number Theory Meeting, Dresden, Germany; March 8, 2019
- *The rank of universal quadratic forms over number fields*; Conference on the Arithmetic Theory of Quadratic Forms, Seoul National U., Korea; January 7, 2019
- *Universal quadratic forms and class numbers of real quadratic fields*; Mathematical Colloquium, Göttingen, Germany; October 26, 2016
- *Universal quadratic forms over number fields*; Rényi Institute, Hungary; May 24, 2016
- *Universal quadratic forms and indecomposable integers in* $\mathbb{Q}(\sqrt{D})$; Oberseminar Analytic Number Theory, Göttingen, Germany; April 11, 2016
- *Universal quadratic forms and continued fractions*; Mathematical Colloquium, Masaryk University, Brno, Czechia; November 6, 2015
- *Number fields without universal n-ary quadratic forms*; Göttingen–Hannover Number Theory Workshop, Germany; April 24, 2015
- *Provability of Fermat's Last Theorem in arithmetics with weak exponential*; Automorphic

Forms and Representation Theory Seminar, Purdue University, USA; December 9, 2014
- *Number of self-dual automorphic representations of GL(N) and depth preservation*; Families of Automorphic Forms and the Trace Formula; BIRS, Canada; December 3, 2014
- *Number of self-dual automorphic representations of GL(N) and depth preservation*; Oberseminar Analytic Number Theory, Göttingen, Germany; November 10, 2014
- *Counting (self-dual) automorphic representations*; Texas–Oklahoma Representations and Automorphic Forms VI; March 8, 2014

Contributed conference talks (selected)
- *Universal quadratic forms and Northcott property of infinite number fields*; 8th Mini Symposium RNTA, Rome, Italy; April 17, 2024
- *A density result for universal quadratic forms over number fields*; Leuca 2022, Italy; May 16, 2022
- *Lifting problem for universal quadratic forms*; 31st Journées Arith., Turkey; July 4, 2019
- *Classifications of finitely generated semifields and lattice-ordered groups*; 98th AAA, Dresden, Germany; June 21, 2019
- *Classifications of finitely generated semifields and lattice-ordered groups*; 56th SSAOS, Czechia; September 6, 2018
- *Universal quadratic forms over number fields*; Quadratic forms in Chile, Talca; January 12, 2018
- *Universal quadratic forms over number fields*; 30th Journées Arith., France; July 7, 2017

Fun

- Running (half-marathon PR 1:34:15)
- Hiking (climbed Stok Kangri, 6150 m)
- Passively interested in rationalism and AI safety since 2010