Contact Information	RIKEN AIP Mathematical Science Team Mitsui Building, 15th floor 1-4-1 Nihonbashi, Chuo-ku Tokyo 103-0027, Japan	erenmehmetkiral@protonmail.com https://ekiral.github.io/ Nationality: Republic of Turkey Date of Birth: 19.09.1986	
Notes	Google Scholar ID: user=SzYItNoAAAAJ	ORCID ID: 0000-0003-4367-338X	
Research Interests	Bayesian Learning, Deep Learning, Lie group and representations, L -functions, metaplection	ps in machine learning, automorphic forms ic forms, analytic number theory.	
Education	 Brown University, Providence, RI Ph.D. in Mathematics, May 2014 Advisor Jeffrey Hoffstein Thesis Title: Spectral Theory and Shifted Convolution Sums in Analytic Number Theory M.S. in Mathematics, May 2012 Boğaziçi University, İstanbul, Turkey. B.Sc. in Mathematics, June 2008 Graduated with GPA 3.93/4.00 The Rectorate Special Award 		
Positions Held	 Postdoctoral Researcher RIKEN AIP June 2025–Present. Project Associate Professor Keio University September 2023–May 2025. Special Postdoctoral Researcher (SPDR) RIKEN AIP, Mathematical Science Team, Yokohama, Japan. March 2020–August 2023. Team Leader: Kenichi Bannai JSPS Fellow Host Insitution: Sophia University. October 2018–February 2020. Host Researcher: Maki Nakasuji Postdoc Keio University April 2018–September 2018. Postdoc Mentor: Kenichi Bannai Postdoc MSRI Semester Program: Analytic Number Theory, Mathematical Sciences Research Institute, Berkeley CA. (Spring 2017). Postdoc Mentor: Dinakar Ramakrishnan Visiting Assistant Professor Texas A&M University (Fall 2014–August 2017) Postdoc Mentor: Matthew Young Teaching Fellow Brown University. Graduate Member Automorphic Forms, Combinatorial Representation Theory and Multiple Dirichlet series, semester program in ICERM, Providence, RI (Spring 2013) 		

Honors and Awards	2020 2018 2016 2009 2009 2008 2008 2008	 SPDR (2020–2023, 3,000,000 JPY) KAKENHI (2018–2020, 2,300,000 JPY) AMS-Simons Travel Grant Graduate Fellowship, Brown University Dora Aksoy Award Scholarship, Vehbi Koç Foundation First rank in the Faculty of Arts and Sciences The Rectorate Special Award, Boğaziçi University 	Research Budget by RIKEN Grant-in-Aid for JSPS Fellows An award for scientific travel Given in recognition of excellence in undergraduate mathematics Given in recognition of excellence in undergraduate mathematics Given to one person from the out- going year for academic success and		
PUBLICATIONS AND 1. "The PREPRINTS joint The TAT 2. "Sub joint Acta 3 "Par		outstanding public work. "The Lie-Group Bayesian Learning Rule" joint with Thomas Möllenhoff and M. Emtiyaz Khan. The 26th International Conference on Artificial Intelligence and Statistics (AIS- TATS 2023) in Proceedings of Machine Learning Research (PMLR) 206:3331-3352. "Subconvexity for twisted GL(3) L-functions" joint with Chan Ieong Kuan and Didier Lesesvre. Acta Arithmetica 202 (2022), 281-302. "Parametrization of Kloosterman sets and SLa-Kloosterman sums"			
	 5. Turantermation of Ribbsterman bets and 5D₃ Ribbsterman sums joint with Maki Nakasuji. Advances in Mathematics 403 (2022), 108392. 4. "Additive twists and a conjecture by Mazur, Rubin and Stein" joint with Nikolaos Diamantis, Jeffrey Hoffstein and Min Lee Journal of Number Theory 209 (2020): 1-36. 5. "Level reciprocity in the twisted second moment of Rankin-Selberg L-functions" joint with Nickolas Andersen Mathematika Volume 64, Issue 3, (2018): 770–784. 6. "The fifth moment of modular L-functions" 				
	 joint with Matthew Young. Journal of the European Mathematical Society (JEMS), Volume 23, Issue 1, (2021): 237-314. "Kloosterman sums and Fourier coefficients of Eisenstein series" joint with Matthew Young. The Ramanujan Journal Volume 49, (2019): 391-409. "Oscillatory integrals with uniformity in parameters" joint with Ian Petrow, Matthew Young. Laurnal 47 h (aris dae Normhere de Paradeeur Tarre 21 No. 1 (2010): 145, 150. 				
	9. "Th joint Alge	rnal de Théorie des Nombres de Bordeaux e Voronoi formula and double Dirichlet seit t with F. Zhou. ebra & Number Theory Volume 10, No. 10,	Tome 31 No. 1 (2019): 145–159. ries" , (2016):2267–2286.		
1	10. "Op <i>Mat</i> 11. "Bo	 "Opposite sign Kloosterman sum Zeta function" Mathematika, Volume 62, Issue 02, (2016): 406–429. "Bounds on sup-norms of half integral weight modular forms" 			
:	Acte 12. "Co joint Jour	a Arithmetica, Volume 165 No. 4 (2014): 3 unting square discriminants" t with T. Hulse, C. I. Kuan, L. M. Lim. rnal of Number Theory, Volume 162, (2016	85-400. 5): 255-274.		
	13. "Sul Mat 14. "Th joint Inte	beconvexity for half-integral weight L-funct hematische Zeitschrift, Volume 281, Issue e sign of Fourier coefficients of half integra t with T. Hulse, C. I. Kuan, L. M. Lim rnational Journal of Number Theory Volu	ions" 3 (2015): 689–722. al weight cusp forms" me 8, No. 03 (2012): 749–762.		

Selected Conferences and Workshops attended	 Automorphic forms and Arithmetic Mathema Workshop ID: 1736. Oberwolfach, Germany. BIRS Workshop 13w5154 Whittaker Function Banff International Research Station. Banff, International Colloquium on Automorphic for for Fundamental Research. Mumbai, India (J 2011 Arizona Winter School, Arizona State U 	tisches Forschunginstitut Oberwolfach, (September 2017) s: Number theory, Geometry and Physics, Alberta, Canada. (October 2013) ms and Representations, Tata Institute January 2012) Jniversity. Tuscon, AZ. (March 2011)			
Services	 Organized the workshop on automorphic forms and L-functions in Nesin Mathematics Village, İzmir, Selçuk, Turkey, July 30-August 5, 2018. Co-organized the Number Theory seminar in Texas A&M University, 2015-2017. Co-organized a graduate student conference at Brown funded by the AMS student chapter. (May 2013) Editor for "Matematik Dünyası" (World of Mathematics), a Turkish popular mathematics magazine, 2005-2014 and 2019-2020. 				
Teaching	Texas A&M University, College Station, TX				
EXPERIENCE	Communications and Cryptography	Fall 2016			
	Linear Algebra	Spring 2016			
	Discrete Mathematics	Fall 2015			
	Linear Algebra	Spring 2015			
	Calculus I	Fall 2014			
	Brown University, Providence, RI				
	as Teaching Fellow (instructor for the course)				
	Calculus II	Fall 2013			
	Multivariable Calculus	Spring 2012, Fall 2012			
	as Teaching Assistant				
	Calculus I Spring 2011, Fall 2011				
	Mathematics Village , Sirince, Selçuk, Izmi A non-profit initiative that promotes interest school, undergraduate and graduate students designed and taught courses for all levels:	ir, Turkey t and provides training to bright high-			
	Prime factorization in algebraic number fie	elds Summer 2023			
	Lerch Zeta functions & Heisenberg group	Summer 2022			
	Riemann-Zeta and L-Functions	Summer 2018			
	Lie Algebras	Summer 2014			
	Coding for high school students (python)	Summer 2014			
	Classical Automorphic Forms	Summer 2011			
	Number Theory for high school students	Summer 2011			
	Dedekind Rings	Summer 2010			
	Multivariable Calculus	Summer 2010			
	Hilbert Spaces	Summer 2009			
	Multivariable Calculus	Summer 2008			
	Geometric Algebra	Summer 2008			
	Complex Analysis	Summer 2007			
	Boğaziçi University Istanbul, Turkey				
	as Teaching Assistant				
	Real Analysis	Spring 2010, Fall 2009			

LANGUAGES Turkish (native), English (fluent), German (beginner), Japanese (beginner).

 Rutgers University Number Theory Seminar, New Brunswick, NJ. (December 2015). SUNY at Buffalo Analysis Seminar, Buffalo, NY. (October 2015). Texas A&M University Number Theory Seminar, College Station, TX. (September 2015). Texas A&M University Number Theory Seminar, College Station, TX. (October 2014). Texas A&M University Number Theory Seminar, College Station, TX. (April 2014). Boğaziçi University Colloquium, İstanbul, Turkey. (January 2014). University of Colorado Number Theory Seminar, Boulder, CO. (November 2013). Five College Number Theory Seminar, Amherst, MA. (September 2013). 21st National Mathematics Symposium, Koç University, Turkey. (September 2008). 	Invited Talks	 Kloosterman Sums for SL(3) long word element Hong Kong University Number Theory Days (June 2025) Lie Group Bayesian Learning Rule OCAMI Workshop Statistical Theories and Machine Learning Using Geometric Methods, Osaka, Japan (December 2023) Chung-Ang University seminar, Scoul Korea (November 2023) FIAS seminar, Seoul Korea (November 2023) POSTECH MINDS seminar, Pohang, Korea (November 2023) YMC 2023, Young Mathematicians Challenge Tokyo, Japan (March 2023) Vector Institute, via Zoom (March 2023) Continued Fractions Spring/Fall Mathematics Gatherings at Bursa University via Zoom (October 2021) Calculating ζ and L-functions Colloquium of Directed Readings Program, DRP Math Turkey, online (August 2021) Cryptography Mathematics Workshop at Ankara University, via Zoom (July 2021). Kloosterman Sums for SL(3) Long Word element 2020 Fall POSTECH PMI Number Theory Seminar in South Korea, via Zoom (September 2020) Kloosterman sums for SL(3) Long Word Element UCGEN online seminar, Interna- tional Algebraic Geometry Joy, (September 2020) Riemann Hypothesis. In Turkish, expository. Sciences Village unsolved problems online video series (October 2020) Isidot Number Theory Seminar, Bristol, UK (December 2019) Linfoot Number Theory Seminar, Bristol, UK (December 2019) KIAS mumber Theory Seminar, Seoul, Korea (March 2019) KIAS number Theory Seminar, Seoul, Korea (March 2019) KIAS number Theory Seminar, Bristol, UK (February 2019) Number Theory Seminar, Sciel, Korea (March 2019) Sophia University Colloquium Tokyo, Japan (April 2017) Texas A&M Number Theory Seminar College Station, TX. (November 2017) Claremont McKenaa College Colloquium Claremont, CA. (April 2017) Texas A&M Number Theory Seminar College Station, TX. (November 2017) Claremont McKenaa College Colloquium Theory Seminar, Baton Rogue, LA (February 2016).
 Rutgers University Number Theory Seminar, New Brunswick, NJ. (December 2015). SUNY at Buffalo Analysis Seminar, Buffalo, NY. (October 2015). Texas A&M University Number Theory Seminar, College Station, TX. (September 2015). Texas A&M University Number Theory Seminar, College Station, TX. (October 2014). Texas A&M University Number Theory Seminar, College Station, TX. (April 2014). Boğaziçi University Colloquium, İstanbul, Turkey. (January 2014). University of Colorado Number Theory Seminar, Boulder, CO. (November 2013). Five College Number Theory Seminar, Amherst, MA. (September 2013). 21st National Mathematics Symposium, Koç University, Turkey. (September 2008). 		 Connecticut Summer School in Number Theory Storrs, CT. (August 2016) Lousiana State University Algebra and Number Theory Seminar, Baton Rogue, LA (February 2016).
		 (February 2016). Rutgers University Number Theory Seminar, New Brunswick, NJ. (December 2015). SUNY at Buffalo Analysis Seminar, Buffalo, NY. (October 2015). Texas A&M University Number Theory Seminar, College Station, TX. (September 2015). Texas A&M University Number Theory Seminar, College Station, TX. (October 2014). Texas A&M University Number Theory Seminar, College Station, TX. (April 2014). Boğaziçi University Colloquium, İstanbul, Turkey. (January 2014). University of Colorado Number Theory Seminar, Boulder, CO. (November 2013). Five College Number Theory Seminar, Amherst, MA. (September 2013). 21st National Mathematics Symposium, Koç University, Turkey. (September 2008).