

CURRICULUM VITAE

HANİFE KÜBRA KAYA

Personal Information

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Position

Current:

- **2018-present:** Research Assistant at Department of Mathematics, Faculty of Engineering and Natural Sciences, Isik University, Istanbul, Türkiye.

Previous:

- **2014-2018:** Mathematics and English Teacher at Some High Schools and Secondary Schools, Karabuk, Türkiye.

Education

- **2022-present:** **PhD**, Student of Mathematics, Isik University, Istanbul, Turkey. GPA: 3.75 out of 4.
Course Period, Supervisor: Prof. Dr. Deniz Karlı
- **2019-2022:** **PhD**, Withdrawer Student of Mathematics, Gebze Technical University, Kocaeli, Türkiye. GPA: 3.79 out of 4.
Thesis Period, Supervisor: Assoc. Prof. Ogul Esen

- **2015-2019: MSc**, Graduated of Mathematics, Karabuk University, Karabuk, Türkiye. GPA: 3.5 out of 4.
Thesis Topic: The Second Order Linear Difference Equations, Supervisor: Assist. Prof. Dr. Ebru Ergun Huseyin
- **2010-2014: BS**, Graduated of Mathematics, Istanbul University, Istanbul, Türkiye. GPA: 3.11 out of 4.
- **2006-2010: HS**, Diploma in Science, Fatih Anatolian High School, Karabuk, Türkiye. GPA: 90.34 out of 100.

Research Backgrounds and Interests

Probability and Statistics

- Probability Theory
- Stochastic Processes
- Stochastic Processes in Engineering

Geometric Mechanics

- Lie Algebroids and Groupoids
- Lagrangian and Hamiltonian Mechanics

Applied Mathematics

- Linear Difference Equations

Publications

Journal Papers

- Ogul Esen, **Hanife Kubra Kaya**, Serkan Sutlu, “On The Problem of Matched Lagrangian Dynamics on Lie Algebroids”, Suleyman Demirel University Journal of Natural and Applied Sciences, Volume 25, Issue 2, 162-171, 2021.
DOI: 10.19113/sdufenbed.812588

Conference Papers

- Ogul Esen, **Hanife Kubra Kaya**, Serkan Sutlu, “Hamiltonian Dynamics on Dual Spaces of Matched Paired Lie Algebroids”, National Symposium on Mathematics, 2021.
- Ogul Esen, **Hanife Kubra Kaya**, Serkan Sutlu, “On Lie Groupoids, Lie Algebroids and Equations of Motion under Mutual Actions”, 4th International Conference on Mathematics, 2020.

Google Scholar

<https://scholar.google.com/citations?user=YmZfnlAAAAAJ&hl=tr>

Talks

- Ogul Esen, **Hanife Kubra Kaya**, Serkan Sutlu, “Lagrangian Dynamics on Matched Paired Lie Algebroids”, Workshop on Nonlinear Systems II, 2020.

Projects

- TUBITAK 3501 Project, “Matched Paired Lagrangian and Hamiltonian Systems”, Boursier, 2019-2021.

Teaching Experiences

- Calculus I
- Calculus II
- Calculus III
- Probability
- Discrete Mathematics
- Differential Equations
- Multivariable Calculus and Differential Equations

All courses have taught as problem solving sessions at the Isik University (Istanbul) from 2018 to present.

Honors and Awards

- **2022-present** : Full Scholarship, Isik University.

Certificates

- **2015** : Pedagogical Formation Education, Karabuk University.

Passed Courses in Graduate Level

- Real Analysis
- Probability
- Potential Theory
- Harmonic Functions Theory
- Integral Transformations
- Fourier Transformations II
- Linear Algebra I
- Number Theory I
- Advanced Complex Analysis I
- Theory of Complex Valued Functions II
- Special Topics From the Theory of Differential Equations I
- Special Topics From the Theory of Differential Equations II
- Introduction to Hamiltonian Formulation of Differential Equations
- Exterior Form Analysis
- Geometric Mechanic
- Mathematical Physics I

Skills

Computer Skills

- **Programming Languages:** R, Python.
- **Software Systems:** Mathematica.
- **Operating Systems:** Windows XP, MacOS.
- **Office Tools:** Microsoft Excel, PowerPoint, Teams, Visio, Word, Pages, Numbers.
- **Text editing and typing:** Latex.

Language Skills

	Reading	Listening	Speaking	Writing
Turkish	Excellent	Excellent	Excellent	Excellent
English	Very good	Very good	Very good	Excellent
German	Basics	Basics	Basics	Basics
Korean	-	Basics	Basics	-
Arabic	Basics	Basics	-	-

Mother Tongue: Turkish.