

## Asst. Prof. OKAN DUMAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AEH-2621-2022

ScopusID: 57326607200

Yoksis Researcher ID: 303098

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Mathematics-Topology, Turkey 2019 - 2024

Postgraduate, Istanbul University, Institute Of Graduate Studies In Sciences, Mathematics-Topology, Turkey 2015 - 2019

Undergraduate, Istanbul University, Faculty Of Science, Department Of Mathematics, Turkey 2011 - 2015

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Education Management and Planning, Pedagogjik Formasyon Eđitimi (Pedagogical Formation Ed.), Istanbul University - Hasan Ali Yucel Faculty of Education, 2016

### Dissertations

Doctorate, Linear control systems on homogeneous spaces, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Department of Mathematics, 2024

Postgraduate, Theorems concerning the existence and uniqueness of solutions of differential equations, Istanbul University, Institute Of Graduate Studies In Sciences, Department of Mathematics, 2019

### Research Areas

Mathematics, Differential Equations, Differential Geometry, Dynamic Systems and Ergodic Theory, General Topology, Topological Groups, Lie Groups

## Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathematics, 2024 - Continues  
Research Assistant, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathematics, 2019 - 2024  
Researcher, Universidade Estadual de Campinas (UNICAMP), Instituto de Matemática, Estatística e Computação Científica, 2022 - 2022

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **One-input linear control systems on the homogeneous spaces of the Heisenberg group - The singular case**  
Silva A. D., Duman O., Kızıl E.  
JOURNAL OF DIFFERENTIAL EQUATIONS, vol.407, pp.133-152, 2024 (SCI-Expanded)
- II. **Involutive automorphisms and derivations of the quaternions**  
Kızıl E., Da Silva A., Duman O.  
TURKISH JOURNAL OF MATHEMATICS, vol.47, no.7, pp.1944-1954, 2023 (SCI-Expanded)
- III. **Linear Control Systems on Homogeneous Spaces of the Heisenberg Group**  
Da Silva A., Kızıl E., Duman O.  
Journal of Dynamical and Control Systems, vol.29, no.4, pp.2065-2086, 2023 (SCI-Expanded)
- IV. **Existence and stability analysis of solution for fractional delay differential equations**  
DEVELİ F., DUMAN O.  
Filomat, vol.37, no.6, pp.1869-1878, 2023 (SCI-Expanded)
- V. **Existence and Hyers–Ulam Stability Results for Partial Fractional-Order Delay Differential Equations**  
Duman O., Develi F.  
Results in Mathematics, vol.77, no.3, 2022 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Controllability analysis of fractional-order delay differential equations via contraction principle**  
Duman O.  
Journal of Mathematical Sciences and Modelling, vol.3, no.7, pp.121-127, 2024 (Peer-Reviewed Journal)
- II. **Existence and stability of solutions to fractional-order differential equations in a weighted space**  
Duman O.  
NOVI SAD JOURNAL OF MATHEMATICS, vol.2, no.54, pp.153-160, 2024 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Some Properties of Linear Vector Fields on Coset Manifold Spaces**  
Duman O.  
International Geometry Symposium in Honor of Prof. Dr. Aysel T. Vanlı, Amasya, Turkey, 1 - 02 July 2024, pp.27-28
- II. **A note on the linear control systems for homogeneous spaces of the Heisenberg group**  
Duman O., Kızıl E., Da Silva A.  
CONGRESO DE MATEMÁTICA CAPRICORNIO (COMCA), Iquique, Chile, 3 - 05 August 2022, pp.68
- III. **On The Controllability of Some Systems on Lie Groups**  
Duman O.  
1st INTERNATIONAL SYMPOSIUM ON CURRENT DEVELOPMENTS IN FUNDAMENTAL AND APPLIED MATHEMATICS SCIENCES (ISCDFAMS 2022), Erzurum, Turkey, 23 - 25 May 2022, vol.1, no.1298, pp.57
- IV. **Existence and Uniqueness Results for Fractional Differential Equations with Delay**  
Duman O., Develi F.  
1st INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN FUNDAMENTAL AND APPLIED SCIENCES (ISFAS-

2021), Erzurum, Turkey, 10 - 12 September 2021, pp.144

**V. Projections of Linear Vector Fields and Control Systems**

Duman O.

33. ULUSAL MATEMATİK SEMPOZYUMU, İstanbul, Turkey, 31 August - 03 September 2021, pp.72

**VI. Some Results on Projections of Affine Vector Fields on Homogeneous Spaces**

Duman O.

18th International Geometry Symposium, Malatya, Turkey, 12 - 13 July 2021, pp.45

## Supported Projects

Kizil E., Duman O., Kara Hansen A., Project Supported by Higher Education Institutions, Involutions of 2-step nilpotent metric Lie algebras, 2021 - 2022

## Scientific Refereeing

MEDITERRANEAN JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, October 2023

FILOMAT, Journal Indexed in SCI-E, April 2023

JOURNAL OF INEQUALITIES AND APPLICATIONS, Journal Indexed in SCI-E, September 2022

## Metrics

Publication: 13

Citation (Scopus): 9

H-Index (Scopus): 2

## Congress and Symposium Activities

GÖKOVA GEOMETRY / TOPOLOGY CONFERENCE, Working Group, Muğla, Turkey, 2024

Congreso de Matemática Capricornio 2022, Attendee, Iquique, Chile, 2022

Workshop on compact homogeneous Einstein manifolds, Working Group, Hradec-Kralove, Czech Republic, 2021

WORKSHOP ON ALGEBRAIC AND APPLIED TOPOLOGY III, Audience, İstanbul, Turkey, 2021

VII School and Workshop on Lie Theory, Working Group, Campinas, Brazil, 2021

33. NATIONAL MATHEMATICS SYMPOSIUM, Attendee, İstanbul, Turkey, 2021

18th International Geometry Symposium, Attendee, Malatya, Turkey, 2021

School and Workshop on Mixing and Control, Italy, Working Group, Trieste, Italy, 2019

## Scholarships

TUBITAK 2211 PhD Scholarship Program, TUBITAK, 2021 - 2024

## Awards

Duman O., Tubitak International Scientific Publications Incentive, Tubitak, February 2025

Duman O., Tubitak International Scientific Publications Incentive, Tubitak, October 2024

Duman O., Publication Incentive Award, Yıldız Teknik Üniversitesi, March 2024

Duman O., Tubitak International Scientific Publications Incentive, Tubitak, March 2024

Duman O., Publication Incentive Award, Yıldız Teknik Üniversitesi, March 2023

Duman O., Tubitak International Scientific Publications Incentive, Tubitak, March 2023