

Süleyman CENGİZCİ, Ph.D. Candidate in Scientific Computing

Doctoral Student at Middle East Technical University, IAM, Scientific Computing

Research & Teaching Assistant of ABU, Department of Economics

Office: AIU A2-41, Üniversite Cad. No: 2, 07190, Döşemealtı / Antalya / TURKEY

Office Phone: +90 (242) 245 01 86 (#2186)

e-mail:

suleyman.cengizci [a] antalya[dot]edu[dot]tr

cengizci.suleyman [a] metu[dot]edu[dot]tr



Education:

- **Ph.D. in Applied Mathematics** (2014 -2018(expected)) [Middle East Technical University, Institute of Applied Mathematics](#), Department of Scientific Computing, Ankara/TURKEY

Specialization: Scientific Computing, Numerical Solutions of Ordinary and Partial Dif. Eq., Finite Element Methods

Thesis: Numerical Solutions of Navier - Stokes Equations for Hypersonic Speed Conditions

Thesis Advisor: Prof. Ömür Uğur

- **M.S in Applied Mathematics** (August, 2014) [Nevşehir Hacı Bektaş Veli University](#) (Middle East Technical University- Engineering Sciences, Ankara), Graduate School of Natural and Applied Sciences, Nevşehir/TURKEY

Specialization: Applied Mathematics (Asymptotic Methods, Singular Perturbation Problems)

: Spectral Methods ([Middle East Technical University, Department of Engineering Sciences](#))

Thesis: Asymptotic Analysis of Singular Perturbation Problems

Thesis Advisor: Dr. Aytakin ERYILMAZ and Dr. M. Tarık ATAY

- **Certificate in Mathematical Education** (June 2014) *Pedagogical Formation*, [Akdeniz University](#), Faculty of Education
- **B.S in Mathematics** (June, 2012) [Ömer Halisdemir University \(Niğde\)](#), Department of Mathematics

Thesis: Dual Spaces

Thesis Advisor: Dr. Ahmet EROĞLU

Research Interests:

- Singular Perturbation Problems
- Asymptotic Methods
- Numerical Solutions of ODE's and PDE's
- Numerical Linear Algebra
- Finite Element Method (FEM)
- Scientific Computing
- Programming
- Hypersonic Fluid Dynamics

Languages:

- Fluent in English and Turkish (native)
- Beginner in German

Professional Experience:

- **Research Assistant**, September 2014 - onwards
Department of Economics, [Antalya Bilim University](#), Antalya/ Turkey
- **Trainee Teacher**, January 2014- June 2014
Antalya Hüsniye Özdilek Vocational High School for Trade, Antalya/Turkey
Courses Taught: Mathematics
- **Trainee Teacher**, June 2013- May 2014
Antalya Vahap Yılmaz Private Teaching Inst., Antalya/Turkey
Courses Taught: Mathematics(High School)
: Geometry(High School)

Visiting Research Institutions:

1. **Visiting Researcher**, Department of Mathematics, Georgia Institute of Technology ([Georgia Tech](#)), USA
(July, 2018-December, 2018) Invited to research
Supervisor: Prof. Yingjie Liu (<http://people.math.gatech.edu/~yingjie/>)
2. **Visiting Staff**, The Interdisciplinary Center for Scientific Computing (IWR), Ruprecht-Karls University of Heidelberg, Germany, (8-11 May, 2017)
Invited by [Prof. Dr. Anna Marciniak-Czochra](#)

Courses:

- I. [Antalya Bilim University](#) (as T.A):

- Calculus for Social Sciences I
- Calculus for Social Sciences II
- Linear Algebra
- Mathematical Economics

Books:

1. **Cengizci S.**, Mühendislik Bilimleri için Bilimsel Hesaplama ve Optimizasyon, (in Turkish, Scientific Computing and Optimization for Engineering Sciences), (in progress)
2. **Cengizci S.**, Teori ve Uygulamalarla Lineer Cebir, (in Turkish, Linear Algebra), (in progress)

Publications:

1. (2015) **Cengizci S.**, Eryilmaz A., "Successive Complementary Expansion Method for solving Troesch's Problem as a Singular Perturbation Problem", *International Journal of Engineering Mathematics* (published) doi:10.1155/2015/949463
2. (2016) **Cengizci S.**, Atay M. T., Eryilmaz A., "A uniformly valid approximation algorithm for singularly perturbed two-point boundary value problems in nonlinear ordinary differential equations" *SpringerPlus* (published) doi: 10.1186/s40064-016-1865-6 (SCI-E)
3. (2016) Atay M. T., **Cengizci S.**, Eryilmaz A., "SCEM Approach for Singularly Perturbed Linear Turning Mid-Point Problems with an Interior Layer", *New Trends in Mathematical Sciences* (published) doi: 10.20852/ntmsci.2016115661
4. (2017) **Süleyman Cengizci**, "An Asymptotic-Numerical Hybrid Method for Solving Singularly Perturbed Linear Delay Differential Equations," *International Journal of Differential Equations*, vol. 2017, Article ID 7269450, 8 pages, 2017. doi:10.1155/2017/7269450 (published) (ESCI)
5. (2017) **Cengizci S.**, Atay M. T., "An asymptotic approach for singularly perturbed turning point problems with dual layers", *Filomat* (under review) (SCI-E)
6. (2017) **Cengizci S.**, " Comparison of MMAE and SCEM for solving singularly perturbed linear boundary layer problems", *Filomat* (under review) (SCI-E)
7. (2017) **Cengizci S.**, "A hybrid method for solving singularly perturbed differential equations with fractional order" *Communications in Nonlinear Science and Numerical Simulation* (in progress) (SCI)
8. (2017) **Cengizci S.**, Atay M. T., "SCEM approach for a coupled system of singularly perturbed reaction-diffusion equations", *Applied Mathematics and Computation* (under review) (SCI-E)
9. (2017) **Cengizci S.**, "On an efficient method for solving singularly perturbed nonlinear difference-differential equations", *Communications in Nonlinear Science and Numerical Simulation* (in progress) (SCI)
10. (2017) **Cengizci S.**, "Uniformly valid hybrid method scheme for solving singularly perturbed parabolic partial differential equations", (in progress)
11. (2017) **Cengizci S.**, "A hybrid method for solving a system of singularly perturbed two-point convection-diffusion equations", *Differential Equations and Dynamical Systems* (under review) (E-SCI)

12. (2017) Cengizci S., "On an efficient hybrid method for a system of singularly perturbed two-point boundary value problems with turning point", (in progress)
13. (2017) Cengizci S., "A finite element based hybrid method for solving singularly perturbed nonlinear differential equations", (in progress)
14. (2017) Cengizci S., "An asymptotic-numerical hybrid scheme for solving singularly perturbed difference-differential equations exhibiting interior layer behavior", (in progress)
15. (2017) Cengizci S., "Numerical experiments on singularly perturbed one-dimensional Bratu problem", (in progress)

Conference Presentations:

1. (2015) Cengizci S., Atay M. T., Eryilmaz A., "A uniformly valid approximation algorithm for singularly perturbed two-point boundary value problems in nonlinear ordinary differential equations", International Conference on Advancements in Mathematical Sciences, Antalya, Turkey.
2. (2016) Cengizci S., Eryilmaz A., "A hybrid approach for solving singularly perturbed turning point problems exhibiting dual layers", International Conference on Mathematics and Mathematics Education (ICMME-2016), Firat University, Elazığ, Turkey, 12-14 May 2016.
3. (2017) Cengizci S., "On an efficient hybrid method for solving singularly perturbed difference-differential equations exhibiting turning layer behavior", (ICCESEN 2017) - 4th International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 4-8 October 2017
4. (2017) Cengizci S., "On an asymptotic-numerical hybrid method for solving singularly perturbed nonlinear delay differential equations", (ICCESEN 2017) - 4th International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 4-8 October 2017
5. (2017) Cengizci S., "SCEM for solving a system of singularly perturbed convection-diffusion equations", International Conference On Applied Analysis and Mathematical Modelling (ICAAMM-2017), Istanbul, Turkey, 3-7 July 2017.
6. (2017) Cengizci S., "On an asymptotic-numerical hybrid scheme for solving singularly perturbed turning point problems with dual layers", International Conference On Applied Analysis and Mathematical Modelling (ICAAMM-2017), Istanbul, Turkey, 3-7 July 2017.

Referee/Reviewer:

- Neural Processing Letters (Springer/SCI-E) x 3
- Mathematical Modelling and Analysis (Taylor & Francis / SCI-E) x 1
- Mathematical Sciences Letters (Natural Sciences Publishing) x 7
- British Journal of Mathematics & Computer Science x 1
- Advances in Research x 1

Editorial Duties:

- [AZE International Journal of Mathematics and Informatics](#)

Computer Skills:

Windows, Linux (Ubuntu), Microsoft Office Pack, MATLAB, FEniCS, Scientific Workplace, LaTeX, C Programming Language, Fortran Programming Language, Python Programming Language

Personal:

Place and date of birth: Antalya; July 4, 1989.

Country of Citizenship: Turkey

Marital Status: Unmarried

Driving Licence: B, 2008

Professional Seminars & Workshops & Boards:

(2011) Statistical Methods for the Service Quality Measurement, Nigde University.

Hobbies:

Swimming, Fishing, Automobiles (Combustion Engines), Space Sciences, Mathematics, Books (Scientific)

References:

➤ **Prof. Ömür UĞUR**

Middle East Technical University, Head of the Department of Scientific Computing

Phone: +90 (312) 210 5617

e-mail: ougur [at] metu.edu.tr

[web](#)

➤ **Prof. Onur KÖKSOY**

Ege University, Head of the Department of Statistics

Phone: +90 (554) 292 77 94

e-mail: onur.koksoy [at] ege.edu.tr

[web](#)

➤ **Prof. Gerhard Wilhelm WEBER**

Middle East Technical University, Department of Scientific Computing

e-mail: gweber [at] metu.edu.tr

[web](#)

➤ **Asst. Prof. Mehmet Tarık ATAY**

Abdullah Gul University, Department of Mechanical Engineering

e-mail: mehmettarik.atay [at] agu.edu.tr

Phone: +90 (554) 292 77 94

[web](#)

➤ **Asst. Prof. Levent KUTLU**

Georgia Institute of Technology, School of Economics

e-mail: levent.kutlu [at] econ.gatech.edu

[web](#)

➤ **Asst. Prof. Nurettin IRMAK**

Ömer Halisdemir University, Department of Mathematics

e-mail: nirmak [at] ohu.edu.tr

[web](#)

Scopus ID: 57151353400

Orcid ID: orcid.org/0000-0002-4345-1253

[ResearchGate](#)

[LinkedIn](#)

[Publons](#)