

Süleyman CENGİZCİ, Öğr. Gör.

Öğretim Görevlisi
Bilimsel Hesaplama Doktor Adayı
Antalya Bilim Üniversitesi
A2-33, Üniversite Cad. No: 2, 07190, Döşemealtı / Antalya

suleyman.cengizci[at]antalya.edu.tr
suleymancengizci[at]gmail.com
Tel : +90 242 245 02 10 (#2210)
Fax: +90 242 245 00 45



EĞİTİM

- **Doktora (Bilimsel Hesaplama)** (2014 - 2021) Orta Doğu Teknik Üniversitesi, Uygulamalı Matematik Enstitüsü, Bilimsel Hesaplama Programı, Ankara / Turkey

Uzmanlıklar: Scientific Computing, Numerical Solutions of Ordinary and Partial Differential Equations, Finite Element Methods, Hypersonic Fluid Mechanics, Stabilization Techniques

Tez: Çok-türlü Euler Denklemlerinin Kimyasal Tepkimeli Hipersonik Akışlar için Stabilize Edilmiş Sonlu Elemanlar Simülasyonları

Tez Danışmanı: Prof. Ömür Uğur (Orta Doğu Teknik Üniversitesi, Uygulamalı Matematik Enstitüsü)

Tez Yardımcı Danışmanı: Prof. Tayfun E. Tezduyar (Rice Üniversitesi, Makine Mühendisliği; Waseda Üniversitesi, Bilim ve Mühendislik Fakültesi)

- **Yüksek Lisans (Uygulamalı Matematik)** (Ağustos, 2014) Nevşehir Hacı Bektaş Veli University (Orta Doğu Teknik Üniversitesi – Mühendislik Bilimleri, Ankara / Turkey), Graduate School of Natural and Applied Sciences, Nevşehir / Turkey

Uzmanlıklar : Uygulamalı Matematik (Asimptotik Metotlar, Singüler Pertürbasyon Problemleri),
: Spectral Metotlar (Middle East Technical University – Engineering Sciences)

Tez: Asymptotic Singüler Pertürbasyon Problemlerinin Asimptotik Analizi

Tez Danışmanı: Yrd. Doç. Dr. Mehmet Tarık Atay

- **International Baccalaureate Mathematics Eğitici Sertifikası** (Kasım 2019), International Baccalaureate Organization
- **Matematik Eğitimi Sertifikası** (Haziran 2014) Pedagojik Formasyon, Akdeniz Üniversitesi (Antalya/Turkey), Eğitim Fakültesi
- **Lisans (Matematik)** (Haziran, 2012) Niğde Ömer Halisdemir University (Niğde/Turkey), Matematik Bölümü
Tez: Dual Uzaylar
- **High School** (Haziran, 2007) Metin-Nuran Çakallıklı Anadolu Lisesi (Antalya / Turkey), Fen Bilimleri

AKADEMİK GÖREVLER

- **Öğretim Görevlisi**, *Aralık 2017 -*
Bilgisayar Programlama + İşletme, [Antalya Bilim University](#), Antalya / Turkey
- **Araştırma Görevlisi**, *Eylül 2014 – Aralık 2017*
İİBF, Ekonomi Bölümü, [Antalya Bilim University](#), Antalya / Turkey

DiĞER GÖREVLER

- **IB (International Baccalaureate) Matematik Öğretmeni**, *Kasım 2019 -*
[Antalya Yusuf Ziya Öner Fen Lisesi](#), Antalya
Dersler: International Baccalaureate, Matematik
- **Trainee Teacher**, *Ocak 2014- Haziran 2014*
[Hüsniye Özdilek Mesleki ve Teknik Anadolu Lisesi](#), Antalya
Dersler: Lise Matematik + Geometri
- **Trainee Teacher**, *Haziran 2013- Mayıs 2014*
Antalya Vahap Yılmaz Özel Eğitim Kurumları, Antalya
Dersler: Lise Matematik + Geometri

EĞİTİM FAALİYETLERİ

- I. **Antalya Bilim Üniversitesi** (Asistan olarak, 2014-2017):
 - *Calculus for Social Sciences I* (x3)
 - *Calculus for Social Sciences II* (x3)
 - *Introduction to Linear Algebra* (x1)
 - *Mathematical Economics* (x1)
- II. **Antalya Bilim University** (Dersin sorumlusu olarak, 2017-)
 - *Introduction to Linear Algebra* (x4)
 - *Information Technologies* (x2)
 - *Calculus for Social Sciences I - II* (x4)
 - *Statistics for Social Sciences* (x2)
 - *Computer Hardware* (x2)
 - *Matematik (in Turkish)* (x3)
 - *Computer Security (in Turkish)* (x1)
 - *Technical Mathematics* (x1)

ARAŞTIRMA ALANLARI

- *Singüler Pertürbasyon Problemleri*
- *Asimptotik Metotlar*
- *Diferansiyel Denklemler*
- *Sayısal Doğrusal Cebir*
- *Sonlu Elemanlar Metotları (FEM)*
- *Bilimsel Hesaplama & Programlama*
- *Hipersonik Akışkanlar Dinamiği*
- *Kanser Modelleme (Doktora Sonrası)*

YAYINLAR

- Akademik Dergilerde Basılmış Yayınlar

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*, 2015. (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*, 5(1), 280, 2016. (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*, 4(1), 115-124, 2016. (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. (2019) S. Cengizci, S. Natesan, M. T. Atay, “An asymptotic-numerical hybrid method for singularly perturbed system of two-point reaction-diffusion boundary-value problems”, *Turkish Journal of Mathematics*, 43(1), 460-472, 2019. doi: 10.3906/mat-1807-195 (published) (SCI-E)
6. (2019) Cengizci S., “A comparison between MMAE and SCEM for solving singularly perturbed linear boundary layer problems”, *Filomat* 33, no. 7 : 2135-2148, 2019. doi: 10.2298/FIL1907135C *Filomat* (published) (SCI-E)

- Devam eden / incelemede olan yayınlar

1. (2020) Cengizci S., Uğur Ö., Natesan S. “A Stabilized Formulation for Numerical Treatment of Convection-dominated Steady Boundary-layer Problems with $YZ\beta$ Shock-capturing”, (in review)
2. (2020) Cengizci S., Uğur Ö., Takizawa K., Tezduyar T. E. “A Stabilized Formulation for Inviscid Hypersonic Flow Around a Cylinder”, (in progress)
3. (2020) Cengizci S., Atay M. T., “An asymptotic approach for singularly perturbed turning point problems with dual layers”, (in progress)
4. (2020) Cengizci S., “A hybrid method for solving singularly perturbed differential equations with fractional order” (in progress)
5. (2020) Cengizci S., “On an efficient method for solving singularly perturbed nonlinear difference-differential equations”, (in progress)
6. (2020) Cengizci S., “Uniformly valid hybrid method scheme for solving singularly perturbed parabolic partial differential equations”, (in progress)
7. (2020) Cengizci S., “A hybrid method for solving a system of singularly perturbed two-point convection-diffusion equations”, (in progress)
8. (2020) Cengizci S., “On an efficient hybrid method for a system of singularly perturbed two-point boundary value problems with turning point”
9. (2020) Cengizci S., “A finite element based hybrid method for solving singularly perturbed nonlinear differential equations”

10. (2020) **Cengizci S.**, “An asymptotic-numerical hybrid scheme for solving singularly perturbed difference-differential equations exhibiting interior layer behavior”
11. (2020) **Cengizci S.**, “Numerical experiments on singularly perturbed one-dimensional Bratu problem”, (in progress)

• **Sunulmuş Sözlü Bildiriler**

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), Fırat 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.
7. (2018) **Cengizci S.**, “Some comparisons between MMAE and SCEM for solving singularly perturbed linear problems”, The Third International Conference on Computational Mathematics and Engineering Sciences (CMES-2018), May 4-6, 2018, Girne, Cyprus.
8. (2018) **Cengizci S.**, “A hybrid simulation for a system of singularly perturbed two-point reaction-diffusion equations”, The Third International Conference on Computational Mathematics and Engineering Sciences (CMES-2018), May 4-6, 2018, Girne, Cyprus.
9. (2019) **Cengizci S.**, “Finite Element Based Hybrid Approximations to Solutions of Singularly Perturbed Problems”, The Fourth International Conference on Computational Mathematics and Engineering Sciences (CMES-2019), April 20-22, 2019, Antalya, Turkey.
10. (2019) **Cengizci S.**, “Finite Element Based Hybrid Approximations to Solutions of Singularly Perturbed Reaction-Diffusion Systems”, The Fourth International Conference on Computational Mathematics and Engineering Sciences (CMES-2019), April 20-22, 2019, Antalya, Turkey.
11. (2019) **Cengizci S.**, “Some Numerical Experiments on Singularly Perturbed Problems with Multi-Parameters”, 8th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2019), August 27-30, 2019, Baku, Azerbaijan.

12. (2020) Cengizci S., Uğur Ö., Takizawa K., Tezduyar T. E. “A Streamline-Upwind/Petrov-Galerkin Formulation For Supersonic and Hypersonic Flow Simulations”, The 20th Biennial Computational Techniques and Applications Conference (CTAC2020), 30th Aug–2nd Sep 2020, Sydney, NSW, Australia.
13. (2020) Cengizci S., Uğur Ö., Natesan S. “A SUPG Formulation for Solving a Class of Singularly Perturbed Steady Problems in 2D”, The 20th Biennial Computational Techniques and Applications Conference (CTAC2020), 30th Aug–2nd Sep 2020, Sydney, NSW, Australia.
14. (2020) Cengizci S., TBA, Advances in Differential Equations and Numerical Analysis (ADENA), October 12-14, 2020, Indian Institute of Technology Guwahati, India.

DİĞER AKADEMİK FAALİYETLER

○ Hakemlik Yapılan Dergiler:

- *Neural Processing Letters (Springer / SCI-E) x 3*
- *Mathematical Modelling and Analysis (Taylor & Francis / SCI-E) x 1*
- *Mathematical Sciences (Springer / E-SCI) x 1*
- *Gazi University Journal of Science (E-SCI) x 1*
- *Hacettepe Journal of Mathematics and Statistics (SCI-E) x 1*
- *Differential Equations and Dynamical Systems (Springer / SCI-E) x 2*
- *Mathematical Methods in the Applied Sciences (Wiley / SCI-E) x 2*
- *International Journal of Advanced Computer Science and Applications (E-SCI) x 2*

○ Ziyaretçi Olunan Enstitüler:

1. Ziyaretçi Araştırmacı, Department of Computing + Mathematical Sciences, California Institute of Technology(CALTECH), ABD.
Danışman: [Prof. Oscar P. Bruno](#)
2. Ziyaretçi Personel (Erasmus+), [The Interdisciplinary Center for Scientific Computing \(IWR\)](#), [Ruprecht-Karls University of Heidelberg](#), Almanya, (8-11 Mayıs, 2017)
Danışman: [Prof. Anna Marciniak-Czochra](#)

○ Diğer

1. Gözlemci Panelist, Matematik ve Fizik Araştırma Grubu, TÜBİTAK 18.09.2020.

BİLGİSAYAR ve PROGRAMLAMA

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

AKADEMİK ÜYELİKLER

- Gesellschaft für Angewandte Mathematik und Mechanik (GAMM)
- International Association of Engineers (IAENG)

- American Physical Society (APS)

AKADEMİK ÖDÜLLER

- Yayın teşvik Ödülü, *Antalya Bilim University* (x 2)
- Yayın Teşvik Ödülü, UBYT, *TÜBİTAK* (x 1)

AKADEMİK BİLİNLİLİK

- Scopus ID: 57151353400
- Orcid: orcid.org/0000-0002-4345-1253
- [ResearchGate](#)
- [LinkedIn](#)
- [Publons](#)
- [arxiv](#)

REFERANSLAR

➤ **Prof. Dr. Ömür UĞUR**

Orta Doğu Teknik Üniversitesi, Uygulamalı
Matematik Enstitü Müdürü
Phone: +90 (312) 210 5617
e-mail: [ougur\[@\]metu.edu.tr](mailto:ougur[@]metu.edu.tr)
[web](#)

➤ **Prof. Dr. Srinivasan NATESAN**

Indian Institute of Technology Guwahati,
Matematik Bölümü
e-mail: [natesan\[@\]iitg.ernet.in](mailto:natesan[@]iitg.ernet.in)
[web](#)

➤ **Prof. Dr. Gerhard Wilhelm WEBER**

Poznan University of Technology, Pazarlama ve
Ekonomi Mühendisliği Bölüm Başkanı
e-mail: [gerhard-wilhelm.weber\[@\]put.poznan.pl](mailto:gerhard-wilhelm.weber[@]put.poznan.pl)
[web](#)

➤ **Doç. Dr. Nurettin IRMAK**

Ömer Halisdemir Üniversitesi, Matematik Bölümü
e-mail: [nirmak\[@\]ohu.edu.tr](mailto:nirmak[@]ohu.edu.tr)
[web](#)

➤ **Doç. Dr. Mehmet Tarık ATAY**

Abdullah Gül Üniversitesi, Makine Mühendisliği
Bölümü
e-mail: [mehmettarik.atay\[@\]agu.edu.tr](mailto:mehmettarik.atay[@]agu.edu.tr)
[web](#)

➤ **Yrd. Doç. Dr. Levent KUTLU**

University of Texas Rio Grande Valley, Ekonomi
Bölümü
e-mail: [kutlulev\[@\]gmail.com](mailto:kutlulev[@]gmail.com)
[web](#)