

Prof. ÇETİN DİŞİBÜYÜK

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: [C-5735-2018](#)

ScopusID: [16645314400](#)

Yoksis Researcher ID: [22361](#)

Education Information

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2005 - 2009

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2003 - 2005

Undergraduate, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, Turkey 1998 - 2003

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, A generalization of the rational Bezier surfaces, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2009

Postgraduate, Rational Bezier curves, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2005

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2025 - Continues

Associate Professor, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2017 - 2025

Assistant Professor, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2011 - 2017

Research Assistant, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2005 - 2011

Academic and Administrative Experience

Deputy Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2023 - 2023

Vice Dean, Dokuz Eylul University, Fen Fakültesi, 2021 - 2022

Deputy Head of Department, Dokuz Eylul University, Fen Fakültesi, Matematik Bölümü, 2018 - 2020

Courses

Doctorate

Ph.D. Thesis, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Ph.D. Research, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Mathematical Aspects of Geometric Modelling, Doctorate, 2015 - 2016

Interpolation and Approximation, Doctorate, 2015 - 2016

Postgraduate

M.Sc. Thesis, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2013 - 2014, 2012 - 2013

M.Sc. Research, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2013 - 2014, 2012 - 2013

Applied Mathematics, Postgraduate, 2023 - 2024, 2022 - 2023, 2019 - 2020

M.Sc. Seminar, Postgraduate, 2022 - 2023, 2013 - 2014

Mathematical Methods, Postgraduate, 2018 - 2019

Numerical and Approximate Methods, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

NUMERICAL and APPROXIMATE METHODS, Postgraduate, 2018 - 2019

APPLIED MATHEMATICS, Postgraduate, 2017 - 2018

APPLIED MATHEMATICS, Postgraduate, 2013 - 2014

Mathematical Methods for Statistics, Postgraduate, 2012 - 2013

Undergraduate

Numerical Analysis, Undergraduate, 2024 - 2025

Project, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2015 - 2016, 2012 - 2013

Numerical Analysis I, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2014 - 2015, 2013 - 2014, 2012 - 2013

Linear Algebra, Undergraduate, 2023 - 2024, 2019 - 2020

Matematik III, Undergraduate, 2024 - 2025

Graduation Project, Undergraduate, 2024 - 2025, 2023 - 2024

Numerical Analysis II, Undergraduate, 2022 - 2023, 2021 - 2022, 2014 - 2015, 2012 - 2013

Mathematical Methods in Computer Aided Geometric Design, Undergraduate, 2023 - 2024, 2022 - 2023, 2019 - 2020

Discrete MATHEMATICS, Undergraduate, 2022 - 2023, 2018 - 2019, 2014 - 2015, 2013 - 2014

Calculus II, Undergraduate, 2021 - 2022

Calculus II, Undergraduate, 2020 - 2021

Calculus I, Undergraduate, 2020 - 2021

Matematik III, Undergraduate, 2018 - 2019, 2014 - 2015, 2012 - 2013

Diferansiyel Denklemler Teorisine Giriş, Undergraduate, 2019 - 2020

Differential Equations and Linear Algebra, Undergraduate, 2019 - 2020

Diferansiyel Denklemler, Undergraduate, 2018 - 2019

Matematik III, Undergraduate, 2018 - 2019

Calculus IV, Undergraduate, 2017 - 2018, 2015 - 2016

Matematik II, Undergraduate, 2016 - 2017

NUMERICAL ANALYSIS II, Undergraduate, 2016 - 2017

Sayısal Analiz, Undergraduate, 2016 - 2017

NUMERICAL ANALYSIS I, Undergraduate, 2017 - 2018

Matematik I, Undergraduate, 2016 - 2017

Kısmi Türevli Denklemler, Undergraduate, 2017 - 2018

Matematik III, Undergraduate, 2017 - 2018, 2016 - 2017

DIFERENTIAL EQUATIONS II, Undergraduate, 2015 - 2016, 2012 - 2013
DIFERENTIAL EQUATIONS I, Undergraduate, 2016 - 2017, 2012 - 2013
MATEMATİK IV, Undergraduate, 2015 - 2016
Diferential Equations I, Undergraduate, 2015 - 2016, 2012 - 2013
MATEMATİK III, Undergraduate, 2015 - 2016
DISCRETE MATHEMATICS, Undergraduate, 2014 - 2015
Matematik II, Undergraduate, 2014 - 2015
Matematik I, Undergraduate, 2015 - 2016
Technical English I, Undergraduate, 2014 - 2015
CALCULUS III, Undergraduate, 2014 - 2015, 2012 - 2013
Calculus III, Undergraduate, 2014 - 2015
TECHNICAL ENGLISH I, Undergraduate, 2014 - 2015
CALCULUS II, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012
Matematik II, Undergraduate, 2013 - 2014
CALCULUS I, Undergraduate, 2013 - 2014, 2011 - 2012
Calculus II, Undergraduate, 2012 - 2013, 2011 - 2012
MATEMATİK I, Undergraduate, 2013 - 2014
Calculus I, Undergraduate, 2013 - 2014, 2011 - 2012
Diferential Equations II, Undergraduate, 2012 - 2013
MATEMATİK I, Undergraduate, 2013 - 2014
MATEMATİK I, Undergraduate, 2012 - 2013
MATH. MODELING AND ITS PHILOSOPHY, Undergraduate, 2011 - 2012
Calculus I, Undergraduate, 2011 - 2012

Supervised Theses

Dişibüyük Ç., Polinom olmayan B-spline fonksiyonları, Doctorate, F.ZÜRNACI(Student), 2022
DİŞİBÜYÜK Ç., Q-Eulerian polinomları ve B-spline fonksiyonları, Postgraduate, Ş.ULUTAŞ(Student), 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Generalized Taylor Series and Peano Kernel Theorem**
Zürnacı Yetiş F., DİŞİBÜYÜK Ç.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, no.5, pp.5521-5530, 2025 (SCI-Expanded)
- II. **A B-spline approach to q-Eulerian polynomials**
Dişibüyük Ç., Ulutas S.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.366, 2020 (SCI-Expanded)
- III. **An alternative distribution function estimation method using rational Bernstein polynomials**
Erdogan M. S., Dişibüyük Ç., Ege Oruç Ö.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.353, pp.232-242, 2019 (SCI-Expanded)
- IV. **Non-polynomial divided differences and B-spline functions**
Zürnacı Yetiş F., Dişibüyük Ç.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.349, pp.579-592, 2019 (SCI-Expanded)
- V. **A unified approach to non-polynomial B-spline curves based on a novel variant of the polar form**
Dişibüyük Ç., Goldman R.
CALCOLO, vol.53, no.4, pp.751-781, 2016 (SCI-Expanded)
- VI. **Extending fundamental formulas from classical B-splines to quantum B-splines**
Budakçı G., Dişibüyük Ç., Goldman R., Oruç H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.282, pp.17-33, 2015 (SCI-Expanded)

- VII. **A functional generalization of the interpolation problem**
 Dişibüyük Ç.
 Applied Mathematics and Computation, vol.256, pp.247-251, 2015 (SCI-Expanded)
- VIII. **A unifying structure for polar forms and for Bernstein Bézier curves**
 Dişibüyük Ç., Goldman R.
 Journal of Approximation Theory, vol.192, pp.234-249, 2015 (SCI-Expanded)
- IX. **Generating functions for B-Splines with knots in geometric or affine progression**
 Dişibüyük Ç., Budakçı G., Goldman R., Oruç H.
 CALCOLO, vol.51, no.4, pp.599-613, 2014 (SCI-Expanded)
- X. **TENSOR PRODUCT q -BERNSTEIN POLYNOMIALS**
 Dişibüyük Ç., Oruç H.
 BIT NUMERICAL MATHEMATICS, vol.48, no.4, pp.689-700, 2008 (SCI-Expanded)
- XI. **A generalization of rational Bernstein-Bezier curves**
 Dişibüyük Ç., Oruc H.
 BIT NUMERICAL MATHEMATICS, vol.47, no.2, pp.313-323, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Homogeneous q -blossoming and Bézier curves**
 DİŞİBÜYÜK Ç.
 Montes Taurus Journal of Pure and Applied Mathematics, vol.4, no.2, pp.86-102, 2022 (Scopus)

Papers Published in Refereed Scientific Meetings

- I. **Non-polynomial Divided Differences and Generalized Taylor Series**
 Zürnacı F., Dişibüyük Ç.
 Approximation Theory 16, Tennessee, United States Of America, 19 - 22 May 2019
- II. **Generalized Taylor Series**
 Zürnacı F., Dişibüyük Ç.
 2019 AWM Research Symposium, Texas, United States Of America, 6 - 07 April 2019
- III. **Non Polynomial Divided Differences and B-Splines**
 Zürnacı F., Dişibüyük Ç.
 Second Conference on Subdivision, Geometric and Algebraic Methods, Isogeometric Analysis and Refinability in Italy, Latina, Italy, 17 - 21 September 2017
- IV. **Non Polynomial B-splines**
 Zürnacı F., Dişibüyük Ç.
 The 8th International Workshop on Differential Equations and Applications, Aydın, Turkey, 2 - 04 June 2017
- V. **A B Spline Approach to q Eulerian Polynomials**
 Dişibüyük Ç., Ulutaş Ş.
 The 28th International Conference of Jangeon Mathematical Society, Antalya, Turkey, 15 - 19 May 2015
- VI. **A Unifying Functional Structure for Polar Forms and for Functional Bernstein Bézier Curves**
 Dişibüyük Ç., Goldman R.
 8th international Conference "Curves and Surfaces", Paris, France, 12 - 18 June 2014
- VII. **Extending Fundamental Formulas from Classical B-splines to q -B-splines**
 Budakçı G., Dişibüyük Ç., Goldman R., Oruç H.
 14th International Conference in Approximation Theory, Texas, United States Of America, 7 - 10 April 2013, pp.4
- VIII. **On de Casteljaeu Type Algorithms**
 Dişibüyük Ç., Oruç H.
 Eighth International Conference on Mathematical Methods for Curves and Surfaces, Oslo, Norway, 28 June - 03 July

2012

IX. On de Casteljaou Type Algorithms

Dişibüyük Ç., Oruç H.

2nd International Symposium on Computing in Science and Engineering (ISCSE 2011), İzmir, Turkey, 1 - 04 June 2011, vol.2, pp.1266-1271

X. Tensor Product q Bernstein Bézier Patches

Dişibüyük Ç., Oruç H.

Fourth Conference on Numerical Analysis and Applications, Burgas, Bulgaria, 16 - 20 June 2008, vol.5434, pp.265-272

XI. Tensor Product q-Bernstein Bezier Patches

DİŞİBÜYÜK Ç., ORUÇ H.

4th International Conference on Numerical Analysis and Applications, Lozenetz, Bulgaria, 16 - 20 June 2008, vol.5434, pp.265-272

XII. A Generalization of Rational Bézier Curves

Dişibüyük Ç., Oruç H.

Workshop on Numerical Methods for Differential Equations, İzmir, Turkey, 12 May 2006