



# SİMTEM BAYRAKÇI DOĞAN

## PROF.

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Address : Akdeniz Üniversitesi Fen Fakültesi Matematik  
Bölümü Antalya

### International Researcher IDs

ScholarID: cqkmunoAAAAJ

ORCID: 0000-0002-7613-5265

Publons / Web Of Science ResearcherID: C-1806-2016

ScopusID: 36129470600

Yoksis Researcher ID: 114385



### Learning Knowledge

Doctorate  
1996 - 2001

Akdeniz University, Institute of Science, Matematik Anabilim Dalı, Turkey

Postgraduate  
1994 - 1996

Akdeniz University, Institute of Science, Matematik Anabilim Dalı, Turkey

Undergraduate  
1990 - 1994

Akdeniz University, Fen\_Edebiyat Fakültesi, Matematik Bölümü, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Genelleşmiş Poisson Yarıgrubu vasıtasıyla B-eliptik potansiyellerin tersini belirleme, Akdeniz University, Institute of Science, Matematik Anabilim Dalı, 2001

Postgraduate, LogTheata\_r Dönüşümleri ve G(kök m) Hecke Gruplarının Çarpan Değerleri, Akdeniz University, Institute of Science, Matematik Bölümü, 1996

### Academic Titles / Tasks

Associate Professor

2014 - Continues

Akdeniz University, Faculty of Science, Department of Mathematics

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Assistant Professor

2002 - 2014

Akdeniz University, Faculty of Science, Department of Mathematics

## Supported Projects

1. BAYRAKÇI DOĞAN S., Uygur V. S., Project Supported by Higher Education Institutions, B-Maksimal Komütatörün ve B-Maksimal Operatörün Komütatörünün Ağırlıklı Lebesgue ve B-Morrey Uzayında Sınırlılığı, 2018 - 2019

## Jury Memberships

Post Graduate, Post Graduate, Akdeniz Üniversitesi, July, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Akdeniz Üniversitesi, June, 2022

Doctorate, Doctorate, Akdeniz Üniversitesi, May, 2022

Post Graduate, Post Graduate, Akdeniz Üniversitesi, January, 2022

Post Graduate, Post Graduate, Akdeniz Üniversitesi, January, 2022

Post Graduate, Post Graduate, Akdeniz Üniversitesi, January, 2022

Post Graduate, Post Graduate, Akdeniz Üniversitesi, March, 2021

Doctorate, Doctorate, Akdeniz Üniversitesi, May, 2018

Post Graduate, Post Graduate, Akdeniz Üniversitesi, December, 2017

Competition, 18.Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2013

Post Graduate, Yüksek Lisans Tez Savunma , T.C. Ahi Evran Üniversitesi Fen Bilimleri Enstitüsü, January, 2013

Competition, 17. Uluslararası Antalya Matematik Olimpiyatı , Akdeniz Üniversitesi, April, 2012

Competition, 16. Uluslararası Antalya Matematik Olimpiyatı , Akdeniz Üniversitesi, March, 2011

Competition, 6. İlköğretim Öğrencilerine Yönelik Matematik ve Fen Bilimleri Proje Çalışması, İl Milli Eğitim Müdürlüğü, June, 2010

Competition, 15.Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2010

Post Graduate, Yüksek Lisans Tez Savunma , T.C. Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü, January, 2010

Competition, 14. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, March, 2009

Competition, 13. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2008

Post Graduate, Yüksek Lisans Tez Savunma , T.C. Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü, January, 2008

Competition, 12. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2007

Post Graduate, Post Graduate, Süleyman Demirel Üniversitesi, January, 2007

Competition, 11. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, June, 2006

Competition, 10.Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, June, 2005

Competition, 9. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2004

Post Graduate, Yüksek Lisans Tez Savunma , T.C. Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü, January, 2004

Competition, 8. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2003

Competition, 7.Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2002

Competition, 6.Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 2001

Competition, 5.Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, June, 2000

Competition, 4. Uluslararası Antalya Matematik Olimpiyatı , Akdeniz Üniversitesi, May, 1999

Competition, 3. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 1998

Competition, 2. Uluslararası Antalya Matematik Olimpiyatı, Akdeniz Üniversitesi, May, 1997

Published journal articles indexed by SCI, SSCI, and AHCI

1. **On Flett potentials associated with the Laplace-Bessel differential operator**  
Bayrakçı Doğan S., Eryiğit M., Sezer Evcan S., Yıldız G.  
ANNALS OF FUNCTIONAL ANALYSIS, vol.14, no.58, pp.57-73, 2023 (SCI-Expanded)
2. **On the BMO spaces associated with the Laplace-Bessel differential operator**  
Bayrakçı Doğan S., Sezer Evcan S., Yıldız G., Kahraman R.  
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.7, pp.2916-2926, 2022 (SCI-Expanded)
3. **On the convergence of the Abel-Poisson means of multiple Fourier series**  
Sezer S., ERYİĞİT M., BAYRAKÇI DOĞAN S.  
Turkish Journal of Mathematics, vol.46, no.4, pp.1302-1309, 2022 (SCI-Expanded)
4. **B-maximal commutators, commutators of B-singular integral operators and B-Riesz potentials on B-Morrey spaces**  
Hasanov J. J., AYAZOĞLU R., BAYRAKÇI DOĞAN S.  
OPEN MATHEMATICS, vol.18, pp.715-730, 2020 (SCI-Expanded)
5. **On the non-tangential convergence of Poisson and modified Poisson semigroups at the smoothness points of  $L_p$ -functions**  
BAYRAKÇI DOĞAN S., Shafiev M. F., Aliev I. A.  
Periodica Mathematica Hungarica, vol.80, no.2, pp.249-258, 2020 (SCI-Expanded)
6. **Commutators of the B-Maximal Operator and B-Maximal Commutators**  
BAYRAKÇI DOĞAN S.  
FILOMAT, vol.34, no.2, pp.499-505, 2020 (SCI-Expanded)
7. **On the boundedness of square function generated by the Bessel differential operator in weighted Lebesque  $L_p$ , alpha spaces**  
BAYRAKÇI DOĞAN S.  
OPEN MATHEMATICS, vol.16, pp.730-739, 2018 (SCI-Expanded)
8. **Square-like functions generated by the Laplace-Bessel differential operator**  
Keles S., Bayrakci S.  
Advances in Difference Equations, vol.2014, no.1, 2014 (SCI-Expanded)
9. **Square-like Functions Generated by a Composite Wavelet Transform**  
Aliev I. A., Bayrakci S.  
Mediterranean Journal of Mathematics, vol.8, no.4, pp.553-561, 2011 (SCI-Expanded)
10. **On approximation properties of bi-parametric parabolic type potentials**  
Bayrakçı S., Sezer S.  
Publicationes Mathematicae, vol.78, no.1, pp.127-139, 2011 (SCI-Expanded)
11. **On approximation properties of the parabolic potentials**  
Uyhan S., Gadjiev A. D., Aliyev İ.  
Bulletin of the Australian Mathematical Society, vol.74, no.3, pp.449-460, 2006 (SCI-Expanded)
12. **On inversion of Bessel potentials associated with the Laplace-Bessel differential operator**  
Aliyev İ., Uyhan-Bayrakci S.  
Acta Mathematica Hungarica, vol.95, no.1-2, pp.125-145, 2002 (SCI-Expanded)

Articles Published in Other Journals

1. **Boundedness of the B-Maximal Commutators on B-Morrey Spaces**  
Bayrakçı Doğan S., Uygur V. S.  
The Mediterranean International Conference of Pure and Applied Mathematics Proceedings Book, vol.1, pp.188-

- 191, 2018 (Peer-Reviewed Journal)
2.  **$L^{p,v}$ -boundedness of the vector-valued B-square functions**  
BAYRAKÇI S., KELES S., FATAİ I.  
Transactions of NAS of Azerbaijan, Issue Mathematics, vol.37, no.4, pp.12-23, 2017 (Scopus)
  3. **On Approximation Properties of Generalized Parabolic Potentials**  
Keles S., Bayrakçı Doğan S.  
Proceedings of the Institute of Mathematics and Mechanics, vol.40, no.1, pp.14-27, 2014 (ESCI)
  4. **On Beta-Semigroup Generated by Fourier-Bessel Transforms and Riesz Potentials Associated With Beta-Semigroup**  
Keles S., Bayrakçı S.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.6, no.2, pp.175-186, 2013 (Peer-Reviewed Journal)
  5. **On Poisson Semigroup generated by the generalized B-translation**  
Bayrakçı Doğan S.  
Global Journal of Dynamical System and Applications (GJDSA), vol.1, pp.679-686, 2005 (Peer-Reviewed Journal)
  6. **On Inversion of B-Elliptic Potentials by the Method of Balakrishnan-Rubin**  
ALİYEV İ., BAYRAKÇI S.  
FRACTIONAL CALCULUS AND APPLIED ANALYSIS, vol.1, no.4, pp.365-384, 1998 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Composite wavelet transforms: Applications and perspectives**  
Aliyev İ., Sezer Evcan S., Bayrakçı Doğan S.  
in: Contemporary Mathematics, Olafsson,G (Olafsson,G) Grinberg,EL (Grinberg,EL) Larson,D (Larson,D) Jorgensen,PET (Jorgensen,PET) Massopust,PR (Massopust,PR) Quinto,ET (Quinto,ET) Rubin,B (Rubin,B), Editor, American Mathematical Society, New York, pp.1-25, 2008

## Refereed Congress / Symposium Publications in Proceedings

1. **On the B-BMO Space generated by the Laplace-Bessel Differential Operator**  
Bayrakçı Doğan S., Yıldız G.  
7th International Zeugma Conference on Scientific Research, Gaziantep, Turkey, 21 - 23 January 2022, pp.1
2. **Boundedness of the B-Maximal Commutators on B-Morrey Spaces**  
BAYRAKÇI S.  
The Mediterranean International Conference of Pure-Applied Mathematics and Related Areas (MICOPAM 2018), Antalya, Turkey, 26 - 29 October 2018, pp.188-191
3. **On non-tangential convergence of modified Poisson semigroup at the nu-smoothness points of  $L^p$ -functions**  
Bayrakçı Doğan S., Shafiyev M.  
Modern Problems of mathematics and mechanics Proceedings of the conference devoted to the 80th anniversary of academician Akif Gadjiev, Baku, Azerbaijan, 6 - 08 December 2017, pp.199-201
4. **B-Campanato spaces and their properties**  
Bayrakçı Doğan S., Keleş S.  
Modern Problems of mathematics and mechanics Proceedings of the conference devoted to the 80th anniversary of academician Akif Gadjiev, Baku, Azerbaijan, 6 - 08 December 2017, pp.112
5. **On the Square function associated with Bessel Differential operator**  
Bayrakçı S.  
international conference "Operators in Morrey-type Spaces and Applications"(OMTSA2017), Kırşehir, Turkey, 10 - 13 July 2017
6. **On a characterization of the Riesz potentials with the aid of the beta-semigroup**

- BAYRAKÇI S.  
Operator on Morrey Type Space and Applications (OMTSA-2011), Kırşehir, Turkey, 20 - 27 May 2011, pp.1
7. **Square-like functions generated by a composite wavelet transform**  
BAYRAKÇI S.  
Bulgarian-Turkish-Ukrainian scientific conference mathematical analysis, Differential equations and their applications, Burgaz, Bulgaria, 15 - 20 September 2010, pp.1
8. **On approximation properties of a bi-parametric family of parabolic potential type operators**  
BAYRAKÇI S.  
Mathematical Analysis Differential Equations and their applications, Famagusta, Cyprus (Kktc), 12 - 15 September 2008, pp.1
9. **A wavelet-like transform generated by a generalized Gauss-Weierstrass Integral and its inverse**  
BAYRAKÇI S.  
16 th International Conference of Jangjeon Mathematical Society, Antalya, Turkey, 4 - 06 July 2005, pp.1
10. **On Poisson semigroup generated by the generalized B-Translation**  
BAYRAKÇI S.  
Dynamical Systems and Applications, Antalya, Turkey, 5 - 10 October 2004, pp.1
11. **On Riesz potentials associated with Laplace-Bessel differential operator**  
BAYRAKÇI S.  
XV. Ulusal Matematik Sempozyumu, Mersin, Turkey, 4 - 07 September 2002, pp.1
12. **On inversion of B-Riesz potentials**  
BAYRAKÇI S.  
XIII. Ulusal Matematik Sempozyumu, İstanbul, Turkey, 6 - 09 September 2000, pp.1
13. **On inversion of Bessel potentials, associated with Laplace-Bessel differential operator**  
BAYRAKÇI S.  
XII. Ulusal Matematik Sempozyumu, Malatya, Turkey, 6 - 10 September 1999, pp.1
14. **On Poisson Semigroup, Associated with the Laplace-Bessel Differential Operator**  
BAYRAKÇI S.  
XI. Ulusal Matematik Sempozyumu, Isparta, Turkey, 15 - 17 September 1998, pp.42-50

## Other Publications

1. **İlginç Limit Problemleri Matematik Dünyası Dergisi Cilt 2**  
BAYRAKÇI S.  
Presentation, pp.15-19, 2002

## Academic and Administrative Experience

2017 - 2021	<b>BAP Scientific Commissioner</b>	Akdeniz University, Faculty Of Science, Department of Mathematics
2014 - 2020	<b>Deputy Head of Department</b>	Akdeniz University, Faculty of Science, Department of Mathematics
2011 - 2013	<b>Board Member</b>	Akdeniz University, Faculty of Science, Department of Mathematics

## Courses

Fonksiyonel Analiz II, Undergraduate, 2020 - 2021

Fonksiyonel Analiz 1 , Undergraduate, 2020 - 2021  
Harmonik Analizde Seçme Konular, Doctorate, 2019 - 2020  
Hilbert Uzayları, Doctorate, 2019 - 2020  
İleri Analiz 2, Undergraduate, 2017 - 2018  
Fonksiyonel Analizde Seçme Konular 2, Doctorate, 2017 - 2018  
İleri Reel Analiz I, Postgraduate, 2016 - 2017  
İleri Analiz 1, Undergraduate, 2016 - 2017  
Reel Analiz II, Undergraduate, 2016 - 2017  
Reel Analiz I, Undergraduate, 2017 - 2018  
Fonksiyonel Analizde Seçme Konular 1, Doctorate, 2016 - 2017  
Analiz 1, Undergraduate, 2015 - 2016  
Analiz 2, Undergraduate, 2016 - 2017  
Matematik II, Undergraduate, 2015 - 2016  
Diferansiyel Denklemler II, Undergraduate, 2014 - 2015

## Advising Theses

Bayrakçı Doğan S., ON THE B-BMO SPACES GENERATED BY LAPLACE-BESSEL DIFFERENTIAL OPERATOR, Postgraduate, G.Yıldız(Student), 2021  
Bayrakçı Doğan S., ON THE BOUNDEDNESS OF THE HARDY-LITTLEWOOD MAXIMAL FUNCTION AND ITS APPLICATION AREAS, Postgraduate, R.Argın(Student), 2021  
BAYRAKÇI DOĞAN S., B-maksimal commutatorun  $L_p$ ? Lebesgue uzayında ve B-Morrey uzayında sınırlılığının, Postgraduate, V.Semih(Student), 2019  
BAYRAKÇI DOĞAN S., Orlicz Uzaylarında Maksimal Operatörünün Sınırlılığı, Postgraduate, S.Tuğçe(Student), 2017  
BAYRAKÇI DOĞAN S., Orlicz ve Orlicz Morrey Uzayları Üzerine, Postgraduate, G.Kökalp(Student), 2017  
BAYRAKÇI DOĞAN S., Fourier-Bessel Harmonik Analizinde Bazı Uzaylar ve İntegral Operatörler Üzerine, Doctorate, Ş.Altinkol(Student), 2014  
BAYRAKÇI DOĞAN S., Genelleşmiş Kaymanın Doğurduğu Kuadratik (Square) Fonksiyonlarının İncelenmesi, Postgraduate, C.Cengiz(Student), 2012  
BAYRAKÇI DOĞAN S., Riesz-Bessel Parabolik Potansiyellerinin Yakınsama Özellikleri, Postgraduate, Ş.Altinkol(Student), 2009  
BAYRAKÇI DOĞAN S., Laplace Operatörünün Doğurduğu Gauss-Weierstrass İntegrali ve Bazı Özelliklerinin İncelenmesi, Postgraduate, U.Ercan(Student), 2007

## Scientific Refereeing

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, July 2021  
TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, February 2019

## Metrics

Publication: 34  
Citation (WoS): 27  
Citation (Scopus): 37  
H-Index (WoS): 3  
H-Index (Scopus): 4

## Congress and Symposium Activities

The Mediterranean International Conference of Pure-Applied Mathematics and Related Areas (MICOPAM 2018),  
Attendee, Antalya, Turkey, 2018

Modern Problems of Mathematics and Mechanics devoted to the 80th anniversary of academician Akif Gadjiev, Baku,  
Azerbaycan, 6 - 08 Aralik 2017, Attendee, Baku, Azerbaijan, 2017

Modern Problems of Mathematics and Mechanics devoted to the 80th anniversary of academician Akif Gadjiev, Baku,  
Azerbaycan, 6 - 08 Aralik 2017, Attendee, Baku, Azerbaijan, 2017

International Conference on Operators in General Morrey-Type Spaces and Applications (OMTSA 2017), Attendee,  
Kırşehir, Turkey, 2017

28. Ulusal Matematik Sempozyumu, Attendee, Antalya, Turkey, 2015

Operators in Morrey-Type Space and Applications-OMTSA 2011, Attendee, Kırşehir, Turkey, 2011

Bulgarian-Turkish-Ukrainian Scientific Conference Mathematical Analysis,Differential Equations and their Applications,  
Attendee, Burgas, Bulgaria, 2010

Mathematical Analysis Differential Equations and their Applications, Attendee, Gazimagusa, Cyprus (Kktc), 2008

16th International Conference of Jangjeon Mathematical Society, Attendee, Turkey, 2005

Dynamical Systems and Applications, Attendee, Antalya, Turkey, 2004

XV. Ulusal Matematik Sempozyumu, Attendee, Mersin, Turkey, 2002

XIII. Ulusal Matematik Sempozyumu, Attendee, İstanbul, Turkey, 2000

XII. Ulusal Matematik Sempozyumu, Attendee, Malatya, Turkey, 1999

XI. Ulusal Matematik Sempozyumu, Attendee, Isparta, Turkey, 1998

## Research Areas

Mathematics, Functional Analysis, Fourier Analysis, Real Functions, Operators, Measure and Integration, Abstract  
Harmonic Analysis, Natural Sciences

## Non Academic Experience

Akdeniz Üniversitesi Fen Fakültesi