

## Prof. Birsen Sağır Duyar

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 1989 - 1993

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 1984 - 1987

Undergraduate, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi Bölümü, Turkey 1980 - 1984

### Dissertations

Doctorate, Wiener tipi  $w$  ( $Bp, q(G), Lv(G)$  ve  $W(Wp, Lr(G))$  uzayları ve özellikleri  $w, v$ , Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), 1993

Postgraduate, Nörlund ortalamaları, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), 1987

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2015 - Continues

Associate Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2010 - 2015

Assistant Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1993 - 2010

Research Assistant, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1985 - 1993

### Academic and Administrative Experience

Ondokuz Mayıs University, 2000 - 2007

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

- I. **On geometrical characteristics and inequalities of new bicomplex Lebesgue Spaces with hyperbolic-valued norm**  
Toksoy E., Sagir B.  
GEORGIAN MATHEMATICAL JOURNAL, 2023 (SCI-Expanded)
- II. **BICOMPLEX MATRIX TRANSFORMATIONS BETWEEN  $c_0$  AND  $c$  IN BICOMPLEX SETTING**  
Sağır Duyar B., Değirmen N., Duyar C.  
UPB SCIENTIFIC BULLETIN, SERIES A: APPLIED MATHEMATICS AND PHYSICS, vol.85, no.4, pp.115-128, 2023 (SCI-Expanded)
- III. **On bicomplex BC-modules  $l_p^{(k)}$  (BC) and some of their geometric properties**  
Değirmen N., Sağır Duyar B.  
GEORGIAN MATHEMATICAL JOURNAL, vol.30, no.1, pp.65-79, 2023 (SCI-Expanded)
- IV. **Some Inequalities in Quasi-Banach Algebra of Non-Newtonian Bicomplex Numbers**  
Sager N., Sağır Duyar B.  
FILOMAT, vol.35, no.7, pp.2231-2243, 2021 (SCI-Expanded)
- V. **On Characterization of Non-Newtonian Superposition Operators in Some Sequence Spaces**  
Sağır Duyar B., Erdogan F.  
FILOMAT, vol.33, no.9, pp.2601-2612, 2019 (SCI-Expanded)
- VI. **Continuity of Superposition Operators on the Double Sequence Spaces of Maddox  $L(p)$**   
Gungor N., Sağır Duyar B.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, vol.41, no.A2, pp.451-456, 2017 (SCI-Expanded)
- VII. **Non-Newtonian Comment of Lebesgue Measure in Real Numbers**  
Duyar C., Sağır Duyar B.  
JOURNAL OF MATHEMATICS, vol.2017, pp.1-4, 2017 (SCI-Expanded)
- VIII. **A New Perspective to Convergence Types in Classical Real Analysis Using Double Sequences**  
Duyar C., Sagir B., Ogur O.  
FILOMAT, vol.30, no.2, pp.483-488, 2016 (SCI-Expanded)
- IX. **A note on weighted Sobolev algebras  $L_{\omega}(1)(R-d)$  boolean AND  $W_k(p)(R-d)$**   
Gungor N., Sağır Duyar B.  
JOURNAL OF THE RAMANUJAN MATHEMATICAL SOCIETY, vol.30, no.4, pp.361-373, 2015 (SCI-Expanded)
- X. **LOCALLY BOUNDEDNESS AND CONTINUITY OF SUPERPOSITION OPERATORS ON DOUBLE SEQUENCE SPACES  $C_{r0}$**   
Sağır Duyar B., Gungor N.  
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, vol.19, no.2, pp.365-377, 2015 (SCI-Expanded)
- XI. **Locally boundedness and continuity of superposition operators on double sequence spaces  $Cr_0$**   
Sağır B., Güngör N.  
Journal of Computational Analysis and Applications, vol.19, no.2, pp.365-377, 2015 (SCI-Expanded)
- XII. **Continuity of Superposition Operators on the Double Sequence Spaces  $L_p$**   
Sağır Duyar B., Gungor N.  
FILOMAT, vol.29, no.9, pp.2107-2118, 2015 (SCI-Expanded)
- XIII. **SOME ASPECTS OF  $L_{\nu}(q)(R-d)$  boolean AND  $W_k(p,w)(R-d)$**   
Gungor N., Sağır Duyar B.  
MISKOLC MATHEMATICAL NOTES, vol.16, no.1, pp.165-180, 2015 (SCI-Expanded)
- XIV. **On a new class  $W_{p,q}$  of Segal algebras**  
Sağır Duyar B., Duyar C.  
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, vol.13, no.4, pp.692-700, 2011 (SCI-Expanded)
- XV. **Multipliers and tensor products of vector valued  $L_p(G, A)$  spaces**  
Sağır B.  
Taiwanese Journal of Mathematics, vol.7, no.3, pp.493-501, 2003 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Common Fixed, Coupled Coincidence and Common Coupled Fixed Point Results in Hyperbolic Valued Metric Spaces**  
Sager N., Sağır B.  
BOLETIM SOCIEDADE PARANAENSE DE MATEMATICA, vol.41, 2023 (ESCI)
- II. **\*-Boundedness and \*-Continuity of Non-Newtonian Superposition Operators on  $\ell^{\infty, \alpha}$  and  $\ell^{1, \beta}$**   
ERDOĞAN F., SAĞIR DUYAR B.  
JOURNAL OF MATHEMATICAL EXTENSION, 2023 (ESCI)
- III. **SOME FUNDAMENTAL PROPERTIES OF BANACH SPACES  $l(p)$  (BC (N)) WITH THE \*-NORM (sic)center dot(sic)(2),(lp(BC(N)))**  
Değirmen N., Sağır Duyar B.  
TRANSACTIONS OF A RAZMADZE MATHEMATICAL INSTITUTE, vol.176, no.2, pp.183-195, 2022 (ESCI)
- IV. **SOME FUNDAMENTAL PROPERTIES OF BANACH SPACES  $l_p$  (BC (N)) WITH.... THE \*-NORM (Equation Presented)**  
Değirmen N., Sağır B.  
Transactions of A. Razmadze Mathematical Institute, vol.176, no.2, pp.183-195, 2022 (Scopus)
- V. **Some fundamental properties of Banach spaces  $l_{\{p\}}(BC(N))$  with the \*-Norm  $\|.\|_{\{2, l_{\{p\}}(BC(N))\}}$**   
DEĞİRMEN N., SAĞIR DUYAR B.  
Transactions of A. Razmadze Mathematical Institute, vol.176, no.2, pp.183-195, 2022 (Peer-Reviewed Journal)
- VI. **Bicomplex numbers with respect to the geometric calculus and some inequalities**  
DEĞİRMEN N., SAĞIR DUYAR B.  
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.38, no.2, pp.335-348, 2022 (Peer-Reviewed Journal)
- VII. **SOME NEW NOTES ON THE BICOMPLEX SEQUENCE SPACES  $l_p$  BC**  
Değirmen N., Sağır Duyar B.  
Journal of Fractional Calculus and Applications, vol.13, no.2, pp.66-76, 2022 (Peer-Reviewed Journal)
- VIII. **\*-Complex Valued Metric Spaces And Zamfirescu Type Contractions**  
Değirmen N., Sağır Duyar B.  
APPLIED MATHEMATICS E-NOTES, vol.22, pp.105-120, 2022 (ESCI)
- IX. **Geometrik hesap tarzına göre Lebesgue dizi uzaylarının bazı geometrik özellikleri**  
SAĞIR DUYAR B., Eyüpoğlu İ.  
Gümüşhane Üniversitesi Fen Bilimleri Dergisi, vol.12, no.2, pp.395-403, 2022 (Peer-Reviewed Journal)
- X. **Some Geometric Properties of Bicomplex Sequence Spaces  $l_p$  BC**  
Değirmen N., Sağır Duyar B.  
Konuralp Journal of Mathematics, vol.10, no.1, pp.44-49, 2022 (Peer-Reviewed Journal)
- XI. **D-Topological Duals of Bicomplex BC-Modules  $l_{\{p\}}^{\{k\}}(BC)$**   
Değirmen N., Sağır Duyar B.  
JOURNAL OF MATHEMATICAL EXTENSION, vol.16, no.10, pp.1-25, 2022 (Peer-Reviewed Journal)
- XII. **D-Topological Duals of Bicomplex BC-Modules  $l_{\{p\}}^{\{k\}}(BC)$**   
Değirmen N., Sağır B.  
JOURNAL OF MATHEMATICAL EXTENSION, no.10, 2022 (ESCI)
- XIII. **Fixed Points of Hyperbolic Contraction Mappings on Hyperbolic Valued Metric Spaces**  
DEĞİRMEN N., SAĞIR DUYAR B.  
Sarajevo Journal of Mathematics, vol.17, no.2, pp.223-236, 2021 (Peer-Reviewed Journal)
- XIV. **On \*-Continuity and \*-Uniform Continuity of Some Non-Newtonian Superposition Operators**  
ERDOĞAN F., SAĞIR DUYAR B.  
Avrupa Bilim ve Teknoloji Dergisi, pp.959-967, 2021 (Peer-Reviewed Journal)
- XV. **Boundedness of Superposition Operators on the Double Sequence Spaces of Maddox  $\mathcal{L}(p)$**   
SAĞIR DUYAR B., GÜNGÖR N.  
International Journal of Latest Technology in Engineering, Management & Applied Science, vol.10, no.10, pp.5-9, 2021 (Peer-Reviewed Journal)

- XVI. **On Characterization of  $\ast$ -Boundedness of Superposition Operators on the Sequence Spaces ...**  
ERDOĞAN F., SAĞIR DUYAR B.  
International Journal of Latest Technology in Engineering, Management & Applied Science, vol.10, no.10, pp.10-17, 2021 (Peer-Reviewed Journal)
- XVII. **ON  $\ast$ -BOUNDEDNESS AND  $\ast$ -LOCAL BOUNDEDNESS OF NON-NEWTONIAN SUPERPOSITION OPERATORS IN  $c_{0,\alpha}$  AND  $c_{\alpha}$  TO  $l_{1,\beta}$**   
ERDOĞAN F., SAĞIR DUYAR B.  
Journal of Universal Mathematics, vol.4, no.2, pp.241-251, 2021 (Peer-Reviewed Journal)
- XVIII. **Banach spaces  $l(p)$  ( $BC(N)$ ) with the  $\ast$ - norm (parallel to)  $\text{double over dot} \cdot$  (parallel to)  $\text{double over dot}(2, l_p(BC(N)))$  and some properties**  
Sager N., Sağır Duyar B.  
TBILISI MATHEMATICAL JOURNAL, vol.14, no.2, pp.65-81, 2021 (ESCI)
- XIX. **On Completeness of Some Bicomplex Sequence Spaces**  
DEĞİRMEN N., SAĞIR DUYAR B.  
Palestine Journal of Mathematics, vol.9, no.2, pp.891-902, 2020 (Scopus)
- XX. **On Non-Newtonian Power Series and Its Applications**  
SAĞIR DUYAR B., ERDOĞAN F.  
Konuralp Journal of Mathematics, vol.8, no.2, pp.294-303, 2020 (Peer-Reviewed Journal)
- XXI. **On Completeness of Some Bicomplex Sequence Spaces**  
Değirmen N., Sağır Duyar B.  
Palestine Journal of Mathematics, vol.9, no.2, pp.891-902, 2020 (Scopus)
- XXII. **On completeness of some bicomplex sequence spaces**  
Sager N., Sağır B., Goyal S.  
Palestine Journal of Mathematics, vol.9, no.2, pp.891-902, 2020 (Scopus)
- XXIII. **A Note on Multipliers of Weighted Lebesgue Spaces**  
SAĞIR DUYAR B., DUYAR C.  
THAI JOURNAL OF MATHEMATICS, vol.17, no.1, pp.229-237, 2019 (Scopus)
- XXIV. **A note on Multipliers of weighted Lebesgue spaces**  
SAĞIR DUYAR B., DUYAR C.  
THAI JOURNAL OF MATHEMATICS, vol.17, no.1, pp.229-237, 2019 (Scopus)
- XXV. **ON THE FUNCTION SEQUENCES AND SERIES IN THE NON-NEWTONIAN CALCULUS**  
Sağır Duyar B., Erdogan F.  
JOURNAL OF SCIENCE AND ARTS, no.4, pp.915-936, 2019 (ESCI)
- XXVI. **VECTOR-VALUED CESARO SUMMABLE GENERALIZED LORENTZ SEQUENCE SPACE**  
OĞUR O., SAĞIR DUYAR B.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.36, no.1, pp.179-186, 2017 (Peer-Reviewed Journal)
- XXVII. **On a Class of  $n$ -Normed Double Sequences Related to  $p$ -Summable Double Sequence Space  $lp(2)$**   
DUYAR C., SAĞIR DUYAR B., OĞUR O.  
Electronic Journal of Mathematical Analysis and Applications, vol.5, no.1, pp.305-312, 2017 (Peer-Reviewed Journal)
- XXVIII. **Vector-valued Cesàro summable generalized Lorentz sequence space**  
OĞUR O., SAĞIR DUYAR B.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.66, no.1, pp.179-186, 2017 (Peer-Reviewed Journal)
- XXIX. **ON  $N$  NORMED CESARO SEQUENCE SPACE  $Ces_n$**   
DUYAR C., KANBER O., SAĞIR DUYAR B.  
Int. Electron. J. Pure Appl. Math, 2016 (Peer-Reviewed Journal)
- XXX. **Some Basic Topological Properties on Non-Newtonian Real Line**  
DUYAR C., SAĞIR DUYAR B., OĞUR O.  
British Journal of Mathematics & Computer Science, vol.9, no.4, pp.295-302, 2015 (Peer-Reviewed Journal)

- XXXI. **Basic Topological Properties on Non Newtonian Real Line**  
DUYAR C., SAĞIR DUYAR B., OĞUR O.  
British Journal of Mathematics & Computer Science, 2015 (Peer-Reviewed Journal)
- XXXII. **CONTINUITY OF SUPERPOSITION OPERATORS ON DOUBLE SEQUENCES SPACES OF MADDOX Cr0 p**  
SAĞIR DUYAR B., GÜNGÖR N.  
Romanian Journal OF Mathematics And Computer Science, vol.5, no.1, pp.35-45, 2015 (Peer-Reviewed Journal)
- XXXIII. **A NOTE ON n BANACH LATTICES**  
SAĞIR DUYAR B., GÜNGÖR N.  
Journal of Applied Functional Analysis, vol.10, no.1/2, pp.70-77, 2015 (Peer-Reviewed Journal)
- XXXIV. **Multiplication Operators On Orlicz Lorentz Spaces**  
SAĞIR DUYAR B., DUYAR C., OĞUR O.  
Journal of Mathematical and Computational Science, vol.44, pp.991-1010, 2015 (Scopus)
- XXXV. **Multiplication operators on Orlicz Lorentz sequence spaces**  
SAĞIR DUYAR B., OĞUR O., DUYAR C.  
Journal of Mathematical Computational Science, vol.5, no.3, pp.265-272, 2015 (Peer-Reviewed Journal)
- XXXVI. **On Vector Valued Generalized Lorentz Difference Sequence Space**  
SAĞIR DUYAR B., OĞUR O.  
Journal Of Operators, vol.545346, 2014 (Peer-Reviewed Journal)
- XXXVII. **A new double sequence space  $m_2 F p$  defined by a double sequence of modulus functions**  
SAĞIR DUYAR B., DUYAR C., OĞUR O.  
International Journal of Analysis, 2014 (Peer-Reviewed Journal)
- XXXVIII. **Some properties of Sobolev algebras modelled on Lorentz spaces**  
Eryilmaz İ., Sağır Duyar B.  
STUDIA UNIVERSITATIS BABES-BOLYAI MATHEMATICA, vol.59, no.1, pp.83-91, 2014 (ESCI)
- XXXIX. **A New Double Sequence Space  $m(2) (F, \phi, p)$  Defined by a Double Sequence of Modulus Functions**  
Sağır Duyar B., Duyar C., Ogur O.  
INTERNATIONAL JOURNAL OF ANALYSIS, 2014 (ESCI)
- XL. **ON FUNCTIONS WITH FOURIER TRANSFORMS IN  $A(p)(lip) (G)$**   
Aydin I., Sağır Duyar B.  
DEMONSTRATIO MATHEMATICA, vol.41, no.2, pp.425-432, 2008 (ESCI)
- XLI. **On functions with Fourier transforms in  $Alipp(G)$**   
Aydin I., Sağır B.  
Demonstratio Mathematica, vol.41, no.2, pp.425-432, 2008 (Scopus)
- XLII. **On Some Properties of Lipschitz Spaces**  
MUTÍ H., SAĞIR DUYAR B.  
Int. J. Appl. Math., no.31, pp.181, 2006 (Peer-Reviewed Journal)
- XLIII. **A note on multipliers of weighted Lipschitz spaces**  
MUTÍ H., SAĞIR DUYAR B.  
Jangjeon Math. Soc., 2005 (Peer-Reviewed Journal)
- XLIV. **On Some Properties of Vector Valued  $A_1 p q G A$  algebras**  
SAĞIR DUYAR B., DUYAR C.  
Int. J. Appl. Math., no.31, pp.33, 2004 (Peer-Reviewed Journal)
- XLV. **Multipliers and Relative Completions of Vector Valued  $L G A$  Spacea**  
DUYAR C., SAĞIR DUYAR B.  
New Zealand J. Math., no.31, pp.33, 2002 (Peer-Reviewed Journal)
- XLVI. **On functions with Fourier transforms in  $W(B,Y)$**   
Sağır B.  
Demonstratio Mathematica, vol.33, no.2, pp.355-363, 2000 (Scopus)
- XLVII. **The Wiener Type Spaces  $W B w y p q G L v r R$**   
SAĞIR DUYAR B., GÜRKANLI A. T.  
İstanbul Üniv. Fen Fak. Mat. Derg., no.57, pp.53, 1999 (Peer-Reviewed Journal)

- XLVIII. **The Wiener Type Spaces  $W_{w,p}L_{v,r}R_n$**   
 SAĞIR DUYAR B., GÜRKANLI A. T.  
 Pure Appl. Math. Sci., pp.1, 1995 (Peer-Reviewed Journal)
- XLIX. **The Spaces  $B_{w,y,p,q}G$  and some properties**  
 SAĞIR DUYAR B., GÜRKANLI A. T.  
 J. Fac. Sci. Ege Univ. Fen. Fak. Derg. Ser. A/B, no.17, pp.2, 1994 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **A NEW APPROACH TO SUPERPOSITION OPERATORS ON SOME NON-NEWTONIAN MADDUX SEQUENCE SPACES**  
 ERDOĞAN F., SAĞIR DUYAR B.  
 in: International Research in Science and Mathematics, Prof.Dr.Rıdvan Karapınar, Editor, Platanus Publishing, Ankara, pp.17-90, 2023
- II. **On Bicomplex Weighted  $\mathbb{BC}$  –Modules  $l_p(\mathbb{BC})$  with Hyperbolic-Valued Norm**  
 SAĞIR DUYAR B., GÜNGÖR N.  
 in: Reflections of Change in Engineering, Science, Maths and Education , TURGUT Begümhan, Editor, SRA Academic Publishing, pp.17-36, 2023

## Refereed Congress / Symposium Publications in Proceedings

- I. **ON A CLASS OF BICOMPLEX WEIGHTED SEQUENCE SPACES**  
 SAĞIR DUYAR B.  
 2. International Black Sea Modern Scientific Research Congress, Rize, Turkey, 21 December 2022, vol.2, pp.127-133
- II. **ON THE LOCALLY BOUNDEDNESS AND UNIFORM CONTINUITY CRITERIAS FOR SUPERPOSITION OPERATORS ON  $L_{\{1\}}(F)$**   
 SAĞIR DUYAR B.  
 12th INTERNATIONAL CONFERENCE ON ENGINEERING & NATURAL SCIENCES, Bingöl, Turkey, 24 December 2021, pp.157-163
- III. **Bikompleks Maddox Dizi Uzaylarının Tamlığı Üzerine**  
 SAGER N., SAĞIR DUYAR B.  
 32. ULUSAL MATEMATİK SEMPOZYUMU, Samsun, Turkey, 31 August - 03 September 2019
- IV. **On the Function Sequences and Series in the Non-Newtonian Calculus**  
 SAĞIR DUYAR B., Erdoğan F.  
 International Conference on Computational and Statistical Methods in Applied Sciences, Samsun, Turkey, 9 - 11 November 2017
- V. **Some Geometric Properties in Weighted Lebesgue Sequence Spaces**  
 SAĞIR DUYAR B., İrem A.  
 International Conference on Computational and Statistical Methods in Applied Sciences, Samsun, Turkey, 9 - 11 November 2017
- VI. **Boundedness of Superposition Operators on the Double Sequence Spaces of Maddox  $L_p$**   
 SAĞIR DUYAR B., GÜNGÖR N.  
 ICRAPAM 2014, 6 - 09 November 2014
- VII. **MULTIPLIERS AND TENSOR PRODUCTS OF VECTOR VALUED  $L_p$  G A SPACES**  
 SAĞIR DUYAR B.  
 SampTA03- The International Conference On Sampling Theory And Applications, 25 - 31 May 2003

## Supported Projects

Sağır Duyar B., Project Supported by Higher Education Institutions, AĞIRLIKLİ LEBESGUE DİZİ UZAYLARINDA BAZI GEOMETRİK ÖZELLİKLER, 2017 - 2019