

Dr. İsmail Aslan

Research Interest

Analysis, Approximation Theory, A-Summability, Convergence in Variation, Error Estimation

Education

Ph.D : TOBB University of Economics and Technology (2014-2019)

M.Sc.: TOBB University of Economics and Technology (2012-2014)

B.Sc.: Hacettepe University (2006-2011)

Work Experience

- Middle East Technical University (Research Assistant) 2014-2017
- Hacettepe University (Research Assistant) 2017-presently

Thesis

Ph.D Thesis: "Study of Approximation Properties of Nonlinear Operators via Summability Process" (2019, Supervisor Prof. Dr. Oktay Duman, Institute of Science, Department of Mathematics, TOBB University of Economics and Technology).

M.Sc Thesis: "Application of the Summability Process on Baskakov-Type Korovkin Theory" (2014, Supervisor Prof. Dr. Oktay Duman, Institute of Science, Department of Mathematics, TOBB University of Economics and Technology).

Publications

- Aslan, I. Convergence in Phi-Variation and Rate of Approximation for Nonlinear Integral Operators Using Summability Process (submitted)
- Aslan, I., Duman, O. Characterization of absolute and uniform continuity, Hacettepe Journal of Mathematics and Statistics (accepted).
- Aslan, I., Duman, O. Nonlinear approximation in N-dimension with the help of summability method, (submitted).
- Aslan, I., Duman, O., 2019. Approximation by nonlinear integral operators via summability process, Math. Nachr., (accepted for publication).
- Aslan, I., Duman, O., 2019. Summability on Mellin-type nonlinear integral operators, Integral Transform. Spec. Funct., 30(6), 492–511.
- Aslan, İ., Duman, O., 2016. A summability process on Baskakov-type approximation, Periodica Mathematica Hungarica, 72(2), 186-199.

Presentations at International Conferences

- Aslan, I, 2019. Summability of Nonlinear Integral Operators in the Space of Bounded ϕ -variation, 2019 The 8th International Conference on Pure and Applied Mathematics, July 22-25, Bruxelles, Belgium.
- Aslan, I., Duman, O., 2019. Application of Summability Process on the Mellintype Nonlinear Integral Operators, The First International Workshop On Constructive Mathematical Analysis, February 11-13, Konya, Turkey.

- Aslan, İ., Duman, O., 2018. Summability method in the approximation by nonlinear integral operators in N-dimension BV-space, 2018 The 7th International Conference on Pure and Applied Mathematics, July 10-13, Budapest, Hungary.
- Aslan, İ., Duman, O., 2017. Approximation by nonlinear integral operators with the help of summation methods, The International Society for Analysis, its Applications and Computation, August 14-18, Vaxjo, Sweden.
- Aslan, İ., Duman, O., 2017. Summability Process on the Approximation by Nonlinear Integral Operators of Convolution Type, International Conference on Mathematics and Mathematics Education, May 11-13, Sanliurfa, Turkey.
- Aslan, İ., Duman, O., 2016. A Generalized Version of the Korovkin Theory, Emerging Trends In Applied Mathematics And Mechanics, May 30 - June 03, Perpignan, France.
- Aslan, İ., Duman, O., 2014. Application of Summability Process on Baskakov Type Korovkin Theory, International Conference on Recent Advances in Pure and Applied Mathematics, November 06-09, Antalya, Turkey.
- Aslan, İ., Duman, O., 2014. Summability Process on the Baskakov type Approximation theory, International Conference "Mathematics Days in Sofia", July 07-10, Sofia, Bulgaria.

Presentations at National Conferences

- Aslan, İ., Duman, O., 2018. Lineer Olmayan İntegral Operatörleriyle Yaklaşımında Bell-Tipinde Toplanabilme Metodu, 13. Ankara Matematik Günleri, 27-28 Nisan, Ankara, Türkiye.

Attended Conferences

- Turkey-Italy Colloquium on Applied Analysis and Differential Equations 2019, July 10-11, Ankara, Turkey

Given Seminars

- Aslan, İ., Duman, O., 2018. Toplam Sürecinin Lineer Olmayan İntegral Operatörleri Üzerindeki Etkileri, Ankara Üniversitesi, 31 Mart, Ankara, Türkiye.

Administrative Duties in Conferences

- Member of Organizing Committee: "12. Ankara Matematik Günleri-AMG 2017", Hacettepe University, Ankara, Turkey, May 25-26, 2017. (National)
- Member of Organizing Committee: "3rd International Conference on Applied Mathematics and Approximation Theory - AMAT 2015", TOBB ETU, Ankara, Turkey, May 28-31, 2015. (International)

Awards and Grants

- Graduate Scholarship, TOBB University of Economics and Technology, 2012-2014
- Ph.D Scholarship, TOBB University of Economics and Technology, 2014-2019
- BİDEB 2211 Ph.D Scholarship, TÜBİTAK, 2016-2018.

- Best Presentation Award, 2018 The 7th International Conference on Pure and Applied Mathematics, July 10-13, Budapest, Hungary.

Courses Assisted

- Math 123, Math 124, Mtk 111, Mtk 112, MtK 311