



Serdar Ay, Ph.D.

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PERSONAL

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| Date of Birth | December 1986 |
| Place of Birth | Antakya/HATAY |

EDUCATION

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| 2012-2018 | Bilkent University, Mathematics, Ph.D. |
| 2010-2012 | Bilkent University, Mathematics, M.S. |
| 2005-2010 | Bilkent University, Mathematics, B.S. |

MSc and Phd advisor: Prof. Dr. Aurelian Gheondea (Institutul de Matematica "Simion Stoilow" al Academiei Romane)

ACADEMIC POSITIONS

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| September/2020 | Assistant Prof., Department of Mathematics at Atılım University, Turkey |
| September/2018- June/2020 | Instructor, Department of Mathematics at Bilkent University, Turkey |

HONORS&AWARDS

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| 1 | Recipient of the Alisbah Award for Mathematics graduate students of Bilkent University (2013) |
| 2 | Shared recipient of Serhat Özyar Young Scientist of the Year (2019) an award for outstanding Phd works in Turkey |

RESEARCH INTERESTS

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| 1 | Functional Analysis, Positivity and Dilation Theory, Topologically Ordered *-spaces, VH(Vector Hilbert) Spaces |
| 2 | Locally Multiplicatively Convex *-Algebras and their Representation Theory |

PUBLICATIONS

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| 1 | S. Ay, A. Gheondea, Representations of *-semigroups associated to invariant kernels with values adjointable operators, <i>Linear Algebra Appl.</i> 486 (2015), 361-388. |
| 2 | S. Ay, A. Gheondea, Representations of *-semigroups associated to invariant kernels with values continuously adjointable operators, <i>Integral Equations and Operator Theory</i> 87:2 (2017), 263-307. |

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| 3 | S. Ay, A. Gheondea, Invariant weakly positive semidefinite kernels with values in topologically ordered \ast -spaces, <i>Studia Mathematica</i> 248:3 (2019), 255-294. |
| 4 | S. Ay, A. Gheondea, Corrigendum to "Representations of \ast -Semigroups Associated to Invariant Kernels with Values Adjointable Operators", <i>Linear Algebra Appl.</i> 589 (2020), 242-246. |
| 5 | S. Ay, Automatic Boundedness of Adjointable Operators on Barreled VH-Spaces, <i>Complex Anal. Op. The.</i> 16:17 (2022) |
| 6 | S. Ay, Isometric Representations of Calibrated Ordered Spaces on $C(X)$, <i>submitted</i> . |

CONFERENCE PRESENTATIONS

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|---|---|
| 1 | <i>Dilation theory of invariant kernels valued in continuously adjointable operators of VH-spaces</i> , Istanbul Analysis Seminars, Turkish Mathematical Society and Sabancı University (2016), İstanbul/Turkey. |
| 2 | <i>Dilation theory of invariant kernels valued in continuously adjointable operators of VH-spaces</i> , International Conference on Complex Analysis and Related Topics-14th Romanian Finnish Seminar, Simion Stoilow Institute of Mathematics of the Romanian Academy and University of Bucharest (2016), Bucharest/Romania. |
| 3 | <i>Dilation theory of invariant kernels valued in continuously adjointable operators of VH-spaces</i> , Operator Theory 26, Simion Stoilow Institute of Mathematics of the Romanian Academy and West University in Timisoara (2016), Timisoara/Romania. |
| 4 | <i>Positive semidefinite kernels with values continuously adjointable operators on VH-spaces</i> , 5th Summer Workshop on Operator Theory, Department of Applied Mathematics of University of Agriculture in Krakow(2016), Krakow/Poland. |
| 5 | <i>Dilations of weakly positive semidefinite doubly invariant kernels valued in topologically ordered \ast-spaces</i> , Operator Theory 27, Simion Stoilow Institute of Mathematics of the Romanian Academy and West University in Timisoara (2018), Timisoara/Romania. |
| 6 | <i>Kalibreli Sıralı uzayların İzometrik Bipozitif Temsilleri</i> , 15. Ankara Matematik Günleri (2024), Hacı Bayram Veli University, Ankara. |
| 7 | <i>Isometric Representations of Calibrated Ordered Spaces on $C(X)$</i> , 2. Workshop on Harmonic Analysis and Operator Theory (2024), İstanbul University, İstanbul. |

CITATIONS

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| Sum of times cited without self-citations (ISI Web of Science): | 1 |
| H-index (ISI Web of Science): | 2 |

COURSES GIVEN

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| 1 | Calculus I (single variable) |
| 2 | Calculus II (multivariable) |
| 3 | Advanced Calculus II (multivariable) |
| 4 | An Introduction to Functional Analysis (undergraduate level) |
| 5 | Linear Algebra and Differential Equations |
| 6 | An Introduction to Complex Analysis (undergraduate level) |
| 7 | An Introduction to Real Analysis (Metric Spaces) (undergraduate level) |
| 8 | Operator Theory (graduate level) |
| 9 | Spectral Representations and Unbounded Operator Theory (graduate level) |