

Assoc. Prof. KOSTYANTYN ZHELTUKHIN

Personal Information

Email: zheltukh@metu.edu.tr

Web: <https://avesis.metu.edu.tr/zheltukh>

International Researcher IDs

ScholarID: SnCds1oAAAAJ

ORCID: 0000-0002-1098-7369

Publons / Web Of Science ResearcherID: AAZ-6715-2020

ScopusID: 6603497099

Yoksis Researcher ID: 207482

Education Information

Postgraduate, Ihsan Dogramaci Bilkent University, Science Faculty, Department of Mathematics, Turkey 1998 - 2002

Research Areas

Natural Sciences

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 2017 - Continues

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 2004 - 2017

Lecturer PhD, Ihsan Dogramaci Bilkent University, Faculty Of Science, Department Of Mathematics, 2002 - 2004

Courses

Discrete Mathematics, Undergraduate, 2020 - 2021

Partial Differential Equations, Undergraduate, 2020 - 2021, 2019 - 2020

Special Functions of Applied Mathematics, Undergraduate, 2020 - 2021, 2019 - 2020

Applied Mathematics II, Undergraduate, 2019 - 2020, 2018 - 2019

Calculus of Functions of Several Variables, Undergraduate, 2018 - 2019

Lebesgue Integral, Undergraduate, 2019 - 2020

Advising Theses

ZHELTUKHIN K., On some classes of semi-discrete Darboux integrable equations, Doctorate, E.BİLEN(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **On the discretization of Darboux Integrable Systems**
ZHELTUKHIN K., ZHELTUKHINA N.
JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS, vol.27, no.4, pp.616-632, 2020 (SCI-Expanded)
- II. **Nonlocal hydrodynamic type of equations**
Gürses M., Pekcan A., Zheltukhin K.
COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION, vol.85, 2020 (SCI-Expanded)
- III. **Discrete symmetries and nonlocal reductions**
GÜRSES M., Pekcan A., ZHELTUKHIN K.
PHYSICS LETTERS A, vol.384, no.3, 2020 (SCI-Expanded)
- IV. **On the discretization of Laine equations**
ZHELTUKHIN K., ZHELTUKHINA N.
JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS, vol.25, no.1, pp.166-177, 2018 (SCI-Expanded)
- V. **On a class of Darboux-integrable semidiscrete equations**
ZHELTUKHIN K., ZHELTUKHINA N., Bilen E.
ADVANCES IN DIFFERENCE EQUATIONS, 2017 (SCI-Expanded)
- VI. **Semi-discrete hyperbolic equations admitting five dimensional characteristic x-ring**
ZHELTUKHIN K., ZHELTUKHINA N.
JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS, vol.23, no.3, pp.351-367, 2016 (SCI-Expanded)
- VII. **Cartan matrices and integrable lattice Toda field equations**
Habibullin I., ZHELTUKHIN K., Yangubaeva M.
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.44, no.46, 2011 (SCI-Expanded)
- VIII. **Dynamical systems and Poisson structures**
Guerses M., Guseinov G. S., ZHELTUKHIN K.
JOURNAL OF MATHEMATICAL PHYSICS, vol.50, no.11, 2009 (SCI-Expanded)
- IX. **Bi-presymplectic chains of co-rank 1 and related Liouville integrable systems**
Blaszak M., Guerses M., ZHELTUKHIN K.
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.42, no.28, 2009 (SCI-Expanded)
- X. **Hydrodynamic type integrable equations on a segment and a half-line**
Guerses M., Habibullin I., ZHELTUKHIN K.
JOURNAL OF MATHEMATICAL PHYSICS, vol.49, no.10, 2008 (SCI-Expanded)
- XI. **Integrable boundary value problems for elliptic type Toda lattice in a disk**
Guerses M., Habibullin I., ZHELTUKHIN K.
JOURNAL OF MATHEMATICAL PHYSICS, vol.48, no.10, 2007 (SCI-Expanded)
- XII. **On a transformation between hierarchies of integrable equations**
GÜRSES M., ZHELTUKHIN K.
PHYSICS LETTERS A, vol.351, pp.37-40, 2006 (SCI-Expanded)
- XIII. **Hamiltonian equations in R-3**
Ay A., GÜRSES M., ZHELTUKHIN K.
JOURNAL OF MATHEMATICAL PHYSICS, vol.44, no.12, pp.5688-5705, 2003 (SCI-Expanded)
- XIV. **Recursion operator and dispersionless rational Lax representation**
ZHELTUKHIN K.
Physics Letters A, vol.297, pp.402-407, 2002 (SCI-Expanded)
- XV. **Some remarks on vector-valued integration.**
Kadets V., Shumyatskiy B., Shvidkoy R., ZHELTUKHIN K., Tseytlin L.
Journal of Mathematical Physics, Analysis, Geometry, 2002 (SCI-Expanded)
- XVI. **On the integrability of a class of Monge-Ampere equations**
BRUNELLI J. C., GÜRSES M., ZHELTUKHIN K.
REVIEWS IN MATHEMATICAL PHYSICS, vol.13, no.4, pp.529-543, 2001 (SCI-Expanded)
- XVII. **Recursion operators of some equations of hydrodynamic type**
GÜRSES M., ZHELTUKHIN K.
JOURNAL OF MATHEMATICAL PHYSICS, vol.42, no.3, pp.1309-1325, 2001 (SCI-Expanded)

- XVIII. **Some Remrks on Vector Measures Duality**
ZHELTUKHIN K., Kadets V.
QUAESTIONES MATHEMATICAE, 2000 (SCI-Expanded)
- XIX. **A vector-valued measure as a basis of a Banach space.**
ZHELTUKHIN K., Kadets V.
Journal of Mathematical Physics, Analysis, Geometry, 1998 (SCI-Expanded)

Articles Published in Other Journals

- I. **ON DISCRETIZATION OF DARBOUX INTEGRABLE SYSTEMS ADMITTING SECOND-ORDER INTEGRALS**
Zheltukhin K., Zheltukhina N.
UFA MATHEMATICAL JOURNAL, vol.13, no.2, pp.170-186, 2021 (ESCI)
- II. **Recursion operator for a system with non-rational Lax representation**
ZHELTUKHIN K.
Ufa Mathematical Journal, vol.8, no.2, pp.112-118, 2016 (Scopus)
- III. **A Banach space generated by the upper Darboux integral.**
ZHELTUKHIN K.
Matematichnī Studii, 1992 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **On existence of an x-integral for a semi-discrete chain of hyperbolic type**
ZHELTUKHIN K., ZHELTUKHINA N.
23rd International Conference on Integrable Systems and Quantum Symmetries (ISQS), Prague, Czech Republic, 23 - 27 June 2015, vol.670

Metrics

Publication: 23
Citation (WoS): 107
Citation (Scopus): 105
H-Index (WoS): 5
H-Index (Scopus): 6