

Assoc. Prof. Şükrü YALÇINKAYA

Personal Information

Office Phone: [+90 212 457 0000](tel:+902124570000) Extension: 15335

Email: sukru.yalcinkaya@istanbul.edu.tr

International Researcher IDs

ORCID: 0000-0001-6550-1250

Publons / Web Of Science ResearcherID: B-3609-2018

Yoksis Researcher ID: 191501

Education Information

Post Doctorate, University Of Western Australia, Australia 2011 - 2011

Post Doctorate, University Of Western Australia, Australia 2008 - 2010

Doctorate, Middle East Technical University, Fen Fakültesi, Matematik, Turkey 2001 - 2007

Postgraduate, Middle East Technical University, Fen Fakültesi, Matematik, Turkey 1999 - 2001

Associate Degree, Middle East Technical University, Fen Fakültesi, Matematik, Turkey 1994 - 1999

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Black box groups and related group theoretic constructions, Middle East Technical University, Fen Fakültesi, Matematik, 2007

Postgraduate, Probabilistic recognition of orthogonal and symplectic groups, Middle East Technical University, Fen Fakültesi, Matematik, 2001

Research Areas

Mathematics, Group Theory and Generalizations, Natural Sciences

Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty of Science, Department of Mathematics, 2017 - Continues

Assistant Professor, Istanbul University, Faculty of Science, Department of Mathematics, 2014 - 2017

Lecturer, Istanbul Bilgi University, Fen Fakültesi, Matematik, 2012 - 2013

Courses

ANALYSIS 2, Undergraduate, 2015 - 2016

ANALYSIS 2, Undergraduate, 2015 - 2016
GRUP TEORİSİNDE SEÇME KONULAR, Undergraduate, 2014 - 2015
ANALYSIS 1, Undergraduate, 2015 - 2016
ANALYSIS 1, Undergraduate, 2015 - 2016
LİNEER CEBİRLERİ VE TEMSİLLERİ, Postgraduate, 2014 - 2015
DİSKRET MATEMATİK, Undergraduate, 2015 - 2016
DİSKRET MATEMATİK, Undergraduate, 2015 - 2016
GRUP TEORİSİNDE SEÇME KONULAR, Undergraduate, 2014 - 2015
MATEMATİK, Undergraduate, 2014 - 2015
MATHEMATICS, Undergraduate, 2014 - 2015
MATEMATİK, Undergraduate, 2014 - 2015
MATEMATİK, Undergraduate, 2014 - 2015
Differential equations and linear algebra, Undergraduate, 2012 - 2013
Calculus, Undergraduate, 2012 - 2013
Algebra III, Postgraduate, 2012 - 2013

Advising Theses

Yalçinkaya Ş., Demirkale F., On designs derived from codes, Postgraduate, K.Duran(Student), 2017

Jury Memberships

Post Graduate, Yüksek Lisans Tez Savunma Jürisi Üyesi, İstanbul Üniversitesi, June, 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Adjoint representations of black box groups $PSL_2(F-q)$**
Borovik A., Yalçinkaya Ş.
JOURNAL OF ALGEBRA, vol.506, pp.540-591, 2018 (SCI-Expanded)
- II. **Generation of finite classical groups by pairs of elements with large fixed point spaces**
Praeger C. E., Seress A., Yalçinkaya S.
JOURNAL OF ALGEBRA, vol.421, pp.56-101, 2015 (SCI-Expanded)
- III. **ON SEMIREGULAR PERMUTATIONS OF A FINITE SET**
Niemeyer A., Popiel T., Praeger C., YALÇINKAYA Ş.
MATHEMATICS OF COMPUTATION, vol.81, no.277, pp.605-622, 2012 (SCI-Expanded)
- IV. **Black box groups**
Yalçinkaya S.
TURKISH JOURNAL OF MATHEMATICS, vol.31, pp.171-210, 2007 (SCI-Expanded)

Books & Book Chapters

- I. **Homomorphic Encryption and Some Black Box Attacks**
Yalçinkaya Ş., Borovik A.
in: Mathematical Software - ICMS 2020, Anna Maria Bigatti, Jacques Carette, James H. Davenport, Michael Joswig, Timo de Wolff, Editor, Springer, London/Berlin, Zug, pp.115-124, 2020
- II. **New approaches in black box group theory**
YALÇINKAYA Ş., Borovik A.
in: Mathematical software - ICMS 2014, Hong H., Yap C., Editor, Springer-Verlag, Heidelberg, pp.53-58, 2014

Other Publications

- I. **NATURAL REPRESENTATIONS OF BLACK BOX GROUPS ENCRYPTING $SL_2(F_q)$**
Yalçinkaya Ş., Borovik A.
Other, pp.1-15, 2020
- II. **Black box, white arrow**
Yalçinkaya Ş., Borovik A.
Other, pp.1-19, 2014
- III. **Construction of some subgroups in black box groups $PGL(2,q)$ and $PSL(2,q)$**
Yalçinkaya Ş., Borovik A.
Other, pp.1-10, 2014
- IV. **Fifty Shades of Black**
Borovik A., Yalçinkaya Ş.
Other, pp.1-23, 2013
- V. **Steinberg presentations of black box classical groups in small characteristics**
Borovik A., Yalçinkaya Ş.
Other, pp.1-32, 2013
- VI. **Construction of Curtis-Phan-Tits system of black box classical groups**
Borovik A., Yalçinkaya Ş.
Other, pp.1-35, 2010
- VII. **Construction of long root $SL(2,q)$ -subgroups in black box groups**
Yalçinkaya Ş.
Other, pp.1-37, 2010

Supported Projects

YALÇINKAYA Ş., Project Supported by Higher Education Institutions, Algorithms for black box groups of Lie type, 2015 - 2015

YALÇINKAYA Ş., Project Supported by Higher Education Institutions, Kara kutu grup algoritmaları için yeni yöntemler, 2014 - 2014

Metrics

Publication: 13

Citation (WoS): 14

Citation (Scopus): 11

H-Index (WoS): 3

H-Index (Scopus): 2

Congress and Symposium Activities

Groups St Andrews 2009 in Bath, Attendee, Bath, United Kingdom, 2009

Matrix Group Recognition, Attendee, Edinburgh, United Kingdom, 2009

Model Theory of Fields, Attendee, Marseille, France, 2007

Groups St Andrews 2005, Attendee, St Andrews, United Kingdom, 2005

An Introduction to Recent Applications of Model Theory, Attendee, Cambridge, United Kingdom, 2005