

## Prof. UMMAHAN EGE ARSLAN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, Turkey  
1998 - 2002

Postgraduate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (YI) (Tezli), Turkey 1995 - 1998

Undergraduate, Anadolu University, Faculty Of Arts And Sciences, Matematik Pr., Turkey 1991 - 1995

### Dissertations

Doctorate, Çarpım cebri ve çaprazlanmış modüller, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2002

Postgraduate, Çaprazlanmış modüller, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (YI) (Tezli), 1998

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Associate Professor, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü,  
2017 - Continues

Assistant Professor, Eskisehir Osmangazi University, Matematik Ve Bilgisayar Bilimleri Bölümü, 2003 - 2017

Research Assistant, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1995 - 2003

### Courses

#### Postgraduate

LİE CEBİRLER(A), Postgraduate, 2017 - 2018

GRUP TEORİSİ II(A), Postgraduate, 2017 - 2018, 2016 - 2017

REPRESENTASYON TEORİSİ I(A), Postgraduate, 2017 - 2018

HALKALAR VE MODÜLLER II(A), Postgraduate, 2017 - 2018

GRUP TEORİSİ I(A), Postgraduate, 2016 - 2017

HALKALAR VE MODÜLLER I(A), Postgraduate, 2016 - 2017

#### **Undergraduate**

ANALİZ IV, Undergraduate, 2017 - 2018

AYRIK MATEMATİK(A), Undergraduate, 2017 - 2018, 2016 - 2017

MODÜL TEORİ(A), Undergraduate, 2017 - 2018

DEĞİŞMELİ CEBİR II(A), Undergraduate, 2017 - 2018

SAYILAR TEORİSİ(A), Undergraduate, 2017 - 2018, 2016 - 2017

DEĞİŞMELİ CEBİRLER I(A), Undergraduate, 2017 - 2018, 2016 - 2017

SOYUT MATEMATİK(A), Undergraduate, 2017 - 2018, 2016 - 2017

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

- I. **A higher-dimensional categorical perspective on 2-crossed modules**  
Ozel E., EGE ARSLAN U., AKÇA İ. İ.  
DEMONSTRATIO MATHEMATICA, vol.57, no.1, 2024 (SCI-Expanded)
- II. **Generalization of Zorn's lemma: maximal crossed ideals**  
Ilgaz Çağlayan E., EGE ARSLAN U.  
Communications in Algebra, vol.49, pp.3727-3735, 2021 (SCI-Expanded)
- III. **Fibrations of 2-crossed modules**  
EGE ARSLAN U., AKÇA İ. İ., Irmak G. O., Avcioglu O.  
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.42, no.16, pp.5293-5304, 2019 (SCI-Expanded)
- IV. **ON THE BARR EXACTNESS PROPERTY OF BXMOD/R**  
Akay H., Arslan U.  
MISKOLC MATHEMATICAL NOTES, vol.19, no.1, pp.37-47, 2018 (SCI-Expanded)
- V. **An embedding theorem for the category of crossed P-modules**  
EGE ARSLAN U., Onarli G.  
GEORGIAN MATHEMATICAL JOURNAL, vol.22, no.3, pp.361-371, 2015 (SCI-Expanded)
- VI. **Annihilators, Multipliers and Crossed Modules**  
Arvasi Z., Ege U.  
Applied Categorical Structures, vol.11, no.6, pp.487-506, 2003 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **On Quasi Quadratic Modules of Lie Algebras**  
ÖZEL E., EGE ARSLAN U.  
Journal of New Theory, no.41, pp.62-69, 2022 (Peer-Reviewed Journal)
- II. **Homotopies of 2-Algebra Morphisms**  
AKÇA İ. İ., EGE ARSLAN U.  
Communications in Advanced Mathematical Sciences, vol.5, no.4, pp.170-179, 2022 (Peer-Reviewed Journal)
- III. **The Theory of Ultra - Groups and GAP Applications**  
SOYLU YILMAZ E., EGE ARSLAN U., kundakçioğlu ş.  
Ikonion Journal of Mathematics, vol.4, no.2, pp.1-11, 2022 (Peer-Reviewed Journal)
- IV. **On Homotopy Theory of Quadratic Modules of Lie Algebras**  
EGE ARSLAN U., ÖZEL E.  
Konuralp Journal of Mathematics, vol.10, no.1, pp.159-165, 2022 (Peer-Reviewed Journal)
- V. **Internal Cat-1 and XMod**  
SOYLU YILMAZ E., EGE ARSLAN U.

- Journal of new theory, vol.38, pp.79-87, 2022 (Peer-Reviewed Journal)
- VI. **ON INTERNAL CATEGORIES IN HIGHER DIMENSIONAL GROUPS**  
Ege Arslan U., Soylu Yilmaz E.  
Journal of universal mathematics, vol.5, no.2, pp.129-138, 2022 (Peer-Reviewed Journal)
- VII. **Bimultiplications and Annihilators of Crossed Modules in Associative Algebras**  
EGE ARSLAN U., HÜRMETLİ S.  
Journal of New Theory, no.35, pp.72-90, 2021 (Peer-Reviewed Journal)
- VIII. **Crossed modules bifibred over k-Algebras**  
GÜRMEEN ALANSAL Ö., EGE ARSLAN U.  
Cumhuriyet Science Journal, vol.42, no.1, pp.99-114, 2021 (Peer-Reviewed Journal)
- IX. **NILPOTENT CROSSED MODULES OF COMMUTATIVE ALGEBRAS**  
EGE ARSLAN U.  
Algebras Groups and Geometries, vol.27, no.1, pp.63-72, 2010 (Peer-Reviewed Journal)
- X. **PSEUDO SIMPLICIAL ALGEBRAS**  
AKÇA İ. İ., EGE ARSLAN U.  
Algebras Groups and Geometries, vol.27, no.1, pp.25-36, 2010 (Peer-Reviewed Journal)
- XI. **ACTOR TOWER AND COMPLETE CROSSED MODULES OF COMMUTATIVE ALGEBRAS**  
EGE ARSLAN U.  
International Mathematical Forum, vol.3, no.8, pp.397-405, 2008 (Peer-Reviewed Journal)
- XII. **Higher Dimensional Free Crossed Modules of Commutative Algebras**  
ARVASI Z., EGE ARSLAN U.  
Algebra, Groups and Geometry, vol.19, no.2, pp.129-145, 2002 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **Soft groups with an application**  
SOYLU YILMAZ E., EGE ARSLAN U.  
7. Uluslararası Erciyes Bilimsel Araştırmalar Kongresi, Kayseri, Turkey, 9 - 10 March 2022
- II. **EQUIVALENCES BETWEEN THE CATEGORIES**  
SOYLU YILMAZ E., EGE ARSLAN U.  
icaens 2021, Konya, Turkey, 01 November 2021
- III. **Internal Cat-1 and XMod**  
EGE ARSLAN U., SOYLU YILMAZ E.  
icaens 2021, Konya, Turkey, 01 November 2021
- IV. **ULTRA-GROUPS: THEORY AND GAP APPLICATIONS'**  
Soylu Yilmaz E., Ege Arslan U.  
8. ULUSLARARASI TEMEL VE UYGULAMALI BİLİMLER KONGRESİ , Antalya, Turkey, 19 - 21 October 2021, pp.1-10
- V. **Fibrations of 2-crossed modules**  
EGE ARSLAN U., AKÇA İ. İ., Irmak g. o., AVCIOĞLU O.  
INTERNATIONAL CONFERENCE ON MATHEMATICS, 3 - 06 July 2018
- VI. **DÜZENLİ KATEGORİLER**  
GÜLSÜN AKAY H., EGE ARSLAN U.  
14. MATEMATİK SEMPOZYUMU, Turkey, 14 - 16 May 2015
- VII. **ÖRGÜLÜ ÇAPRAZLANMIŞ MODÜLLER ÜZERİNE**  
EGE ARSLAN U., GÜLSÜN AKAY H.  
12.MATEMATİK SEMPOZYUMU, Turkey, 23 - 25 May 2013
- VIII. **GRUPLAR ÜZERİNDE ÇAPRAZLANMIŞ MODÜLLER İÇİN GÖMME TEOREMİ**  
EGE ARSLAN U., GÜLÜMSEN O.  
7.ANKARA MATEMATİK GÜNLERİ, Turkey, 31 May - 01 June 2012
- IX. **BASE CHANGE**

EGE ARSLAN U, GÜLÜMSEN O.  
ANTALYA ALGEBRA DAYS XIV, 16 - 20 May 2012

## **Metrics**

Publication: 32  
Citation (WoS): 7  
Citation (Scopus): 13  
H-Index (WoS): 1  
H-Index (Scopus): 2