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PROFESÖR

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Adres: Bahçeşehir Üniversitesi İktisadi İdari ve Sosyal Bilimler Fakültesi

**Öğrenim Bilgisi**

Doktora İSTANBUL TEKNİK ÜNİVERSİTESİ 1988-91

FEN-EDEBİYAT FAKÜLTESİ/MÜHENDİSLİK BİLİMLERİ BÖLÜMÜ/UYGULAMALI  
MEKANİK ANABİLİM DALI

Tez adı: Türbülansa grup teorik bir yaklaşım Tez Danışmanı:(Erdoğan Süleyman Şuhubi)

Yüksek Lisans Naval Postgraduate School 1984-86

Physics

Tez adı: Microscopic measurements Tez Danışmanı:(Donald Walters)

Lisans DENİZ HARP OKULU KOMUTANLIĞI 1976-1980 DENİZ BİLİMLERİ ENSTİTÜSÜ

**Görevler**

PROFESÖR 2018

BAHÇEŞEHİR ÜNİVERSİTESİ/İKTİSADİ, İDARİ VE SOSYAL BİLİMLER FAKÜLTESİ/İŞLETME BÖLÜMÜ/İŞLETME PR. (İNGİLİZCE) (TAM BURLU)

PROFESÖR 2006-2018

YEDİTEPE ÜNİVERSİTESİ/TİCARİ BİLİMLER FAKÜLTESİ/YÖNETİM BİLİŞİM SİSTEMLERİ BÖLÜMÜ)

PROFESÖR 2001-2006

İSTANBUL TEKNİK ÜNİVERSİTESİ/FEN-EDEBİYAT FAKÜLTESİ/MÜHENDİSLİK BİLİMLERİ BÖLÜMÜ/UYGULAMALI MEKANİK ANABİLİM DALI)

DOÇENT 1994-2001

İSTANBUL TEKNİK ÜNİVERSİTESİ/FEN-EDEBİYAT FAKÜLTESİ/MÜHENDİSLİK BİLİMLERİ BÖLÜMÜ/UYGULAMALI MEKANİK ANABİLİM DALI)

YARDIMCI DOÇENT1991-1994

İSTANBUL TEKNİK ÜNİVERSİTESİ/FEN-EDEBİYAT FAKÜLTESİ/MÜHENDİSLİK BİLİMLERİ BÖLÜMÜ/UYGULAMALI MEKANİK ANABİLİM DALI)

**Yönetilen Tezler**

**Yüksek Lisans**

1. SARI ÇİĞDEM, (2016). Wavelet denoising and detrending analysis of gold prices and usd/try exchange rates, Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

2. BLACK JON, (2010). Stokastik modellemesi: İstanbul Menkul Kıymetler Borsası'nın XBANK -Endeksi veU.S. WTI petrol fiyatlar, Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finans Anabilim Dalı

3. TERZİ FELEKNAZ DİLEK, (2009). Feynman-kac theorem and its applications, Yeditepe Üniversitesi->Fen Bilimleri Enstitüsü->Matematik Anabilim Dalı
4. KÜÇÜKURAL ALPER, (2004). Veri madenciliğinin bulanık uzman sistemlerde kullanımı, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
5. ERTANIŞ ERDİNÇ FADIL, (2003). İlişkisel veri tabanı sistemlerinde fonksiyonel ve dereceli bulanık ilişkiörgulama aracı, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
6. OKÇU SEMRA, (2003). Bulanık kümelerin veri madenciliğine uygulanması, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
7. GÜNAL ATILLA, (2003). Pasif algılayıcı verisi birleştirme ve tehdit değerlendirme, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
8. KEKEVİ İBRAHİM ŞAHİN, (2002). Web servis mimarisinin bir uygulaması, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
9. AKKUŞ CEM, (2000). İlişkisel veritabanları üzerinde bulanık sorgulama aracı, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
10. TUTAR CEM, (2000). Veri tabanından bilgi tabanına geçişte bulanık bir araç, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
11. ERKAN ÖZDEN, (2000). Sürekli sistem benzetimi ve diferansiyel denklemler için etkileşimli internet ortamında bir veritabanı yöneticisi, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
12. ÖZAYÇA ELİZABETH CARUANA, (2000). Oracle 8.0.4 veritabanının bir muhasebe modeli uygulaması içinde değerlendirilmesi, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
13. ASAR BAHADIR, (1999). Standart veritabanı sistemlerinde bulanık küme yaklaşımı ile esnek sorgulama, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
14. KIRIŞ AHMET, (1999). Tek serbestlik dereceli lineer olmayan salımcıların yaklaşık simetrikleri ve ilkinTEGRALLERİ, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
15. YONAR YUSUF BARBAROS, (1999). Genel amaçlı bir bulanık uzman sistem, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
16. BİRLİK MEHMET, (1998). Bir arıza giderme uzman sistem kabuğu (AGUSK) ve CFM56 turbofan jet motor arızaları için bir uygulama, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
17. MURATOĞLU ERZA, (1998). Bulanık çıkarım yöntemleri, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
18. ALTUNKÖK BUKET, (1998). Access 2.0 ile bir veritabanı uygulaması: Faturalama sistemi, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
19. NAZLICA UMUT, (1997). İlişkisel veri tabanı mantığına dayalı sigorta otomasyonu, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer
20. MUTLU TANER, (1996). Bulanık olmayan veritabanı sistemleri için bir bulanık sorgulama aracı, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer

21. DEMİRCİ AYHAN, (1996). Tıpta uygulamalar için bir karatahta modeli, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer

22. KÖŞKER REŞAT, (1995). Helmholtz salımcısının rezonans durumlarında dallanma analizi, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer

23. DENİZ NECİBE, (1995). Dempster-Shafer teorisinin değerlendirme problemine uygulanması, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer

24. SARIBİK HAKAN, (1995). Bir bulanık uzman sistem kabuk prototipi, İstanbul Teknik Üniversitesi->Fen Bilimleri Enstitüsü->Diğer

### **Doktora**

25.YILMAZ ADİL (2020) ADVANCED NONLINEAR AND NONSTATIONARY METHODS FOR THE ANALYSIS OF FINANCIAL TIME SERIES Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

26.DEMİREL MUSTAFA (2020) , ESSAYS ON MULTIFRACTAL FEATURES OF EMERGING MARKET BONDS AND RELATED MODELS, Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

27. EMRAH ORAL (2019) Development of New Forecasting Strategies using Wavelet Transform (WT), Multiple Wavelet Coherence (MWC) and Multi-Fractal De-trended Fluctuation Analysis (MFDFA) Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

28.GÜLERCE MUSTAFA, (2018). Identification of increasing relationships between time series by wavelet coherency method and comparison of arma & varma among forecasting methods, Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

29. GENÇER MURAT, (2017). Essays on the price behaviours of energy commodities (Chaos, fractality, wavelet and non-linearity), Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

30. BAYRACI SELÇUK, (2015). Time series analysis of the interest rate dynamics with the stochastic, econometric and econophysics models, Yeditepe Üniversitesi->Sosyal Bilimler Enstitüsü->Finansal İktisat Anabilim Dalı

### **Projelerde Yaptığı Görevler:**

#### **ARAŞTIRMA PROJESİ**

1. NSF INT 0217453 US Turkey Cooperative research program Semi Analytical treatments of Nonlinear Stochastic Dynamical Systems with Application to Control Problems 2002 2005 ,

Yönetici, (2002-2005)

2. Kaotik davranışın analizi, TÜBİTAK PROJESİ, Araştırmacı, 1993-1995 (ULUSAL)

3. uzun ufuk projesi, TÜBİTAK PROJESİ, Araştırmacı, 1991-1993 (ULUSAL)

### **İdari Görevler**

Bölüm Bşk. İSTANBUL TEKNİK ÜNİVERSİTESİ/FEN-EDEBİYAT FAKÜLTESİ/MÜHENDİSLİK BİLİMLERİ BÖLÜMÜ 2004-2006

### Ödüller

1. Bilim Teknoloji, İSTANBUL TEKNİK ÜNİVERSİTESİ VAKFI, 2001
2. Sedat Simavi Vakfı Fen Bilimleri, Sedat Simavi Vakfı, 1997

### Eserler

#### Uluslararası hakemli dergilerde yayımlanan makaleler:

YILMAZ ADİL, ÜNAL GAZANFER (2020) Multiscale Higuchi's fractal dimension method, *Nonlinear Dynamics* (Temmuz Kabul edildi)

OYGUR TUNC, ÜNAL GAZANFER (2020) Traces of the Multifractal Nature of the Financial Crises in Turkey: Co-Movement of the Hölder Exponents and Large-Scale Forecast Fluctuation and Noise Letters, Doi 2050029

YILMAZ ADİL, ÜNAL GAZANFER (2020) Multiscale correlation dimension method *International Journal of Modern Physics C (IJMPC)* 31 (03), 1-17

ORAL EMRAH, ÜNAL GAZANFER (2019), Modeling and forecasting time series of precious metals: a new approach to multifractal data *Financial Innovation* 5 (1), 3, 2 , 2199-4730

YILMAZ ADİL, ÜNAL GAZANFER (2019) Stochastic Duffing equation in modelling of financial time series *International Journal of Dynamics and Control* 7 (4), 1173-1194 doi.org/10.1007/

DOĞANGÜN İTİR, ÜNAL GAZANFER, (2019). Multifractal Behavior in Precious Metals: Wavelet Coherency and Forecasting by VARIMA and V-FARIMA Models. *Annals Of Financial Economics*,

13(04) (Yayın No: 4550346)

ÜNAL GAZANFER,ORAL EMRAH (2018). Modeling and forecasting multifractal wavelet scale: Western market versus eastern market. *International Journal of Modern Physics C*, Doi:.1142/ (Yayın No: 4464339)

GÜLERCE MUSTAFA,ÜNAL GAZANFER (2018). Electricity price forecasting using multiple wavelet coherence method: Comparison of ARMA versus VARMA. *International Journal of Financial Engineering*, 5(1), Doi: 10.1142/ (Yayın No: 4464285)

İYİGÜNLER İSMAİL, ÜNAL GAZANFER,ÇAĞLAR MİNE, (2018). Exact Solvability of Stochastic Differential Equations Driven by Finite Activity Levy Processes.. . *Mathematical and Computational Applications*, 17(1), Doi: 10.3390 (Yayın No: 4551094)

ÜNAL GAZANFER,YILDIRIM YAVUZ (2018). Volatility Modeling With COGARCH(1,1) driven by Meixner-Lévy Process: An Application to Tokyo Stock Exchange Market (Nikkei225).

*International Journal of Dynamics and Control*, 6(2), Doi: 10.1007 (Yayın No:4467886)

OYGUR TUNC , ÜNAL GAZANFER, (2017). THE LARGE FLUCTUATIONS OF THE STOCK RETURN AND FINANCIAL CRISES EVIDENCE

FROM TURKEY: USING WAVELET COHERENCY AND VARMA MODELING TO FORECAST STOCK RETURN. Fluctuation and Noise Letters (Yayın No: 4464210)

ORAL EMRAH, ÜNAL GAZANFER (2017). Dynamic correlation of eastern and western markets and forecasting: Scale by scale wavelet based approach. International Journal of Financial

Engineering, 4(4), Doi: 10.1142/S2424786317500402 (Yayın No: 4467866)

ORAL EMRAH, ÜNAL GAZANFER(2017). Co-movement of precious metals and forecasting using scale by scale wavelet transform. International Journal of Financial Engineering, 4(1), Doi:

10.1142/ (Yayın No: 4464175)

YILMAZ ADİL, ÜNAL GAZANFER, KARATAŞ CENGİZ (2017). Co-movement and Forecasting Analysis of Major Real Estate Markets by Wavelet Coherence and Multiple Wavelet Coherence. Chinese Journal of Urban and Environmental Studies, 5(2), Doi: 10.1142 (Yayın No:4467852)

GÜLERCE MUSTAFA, ÜNAL GAZANFER (2017). FORECASTING OF OIL AND AGRICULTURAL COMMODITY PRICES: VARMA VERSUS ARMA. Annals of Financial Economics, 12(3), Doi:

10.1142/ (Yayın No: 4464245)

YILMAZ ADİL , ÜNAL GAZANFER,(2016). TESTING NON-LINEAR DYNAMICS, LONG MEMORY AND CHAOTIC BEHAVIOUR OF ENERGY COMMODITIES. Theoretical and Practical Research in Economic Fields, 7(2) (Yayın No: 4464098)

YILMAZ ADİL, ÜNAL GAZANFER, (2016). Co-movement analysis of Asian stock markets against FTSE100 and SP 500: Wavelet-based approach.. International Journal of Financial Engineering,12, Doi: 10.1142/S242478631650033X (Yayın No: 4464148)

YILMAZ ADİL, ÜNAL GAZANFER (2016). ) Chaoticity Properties of Fractionally Integrated Generalized Autoregressive Conditional Heteroskedastic Processes.. Bulletin of Mathematical

Sciences and Applications, 15(1), Doi: DOI:10.18052 (Yayın No: 4464066)

GÜLERCE MUSTAFA, ÜNAL GAZANFER, (2016). USING WAVELET ANALYSIS TO UNCOVER THE COMOVEMENT BEHAVIOR OF MULTIPLE ENERGY COMMODITY PRICES. International Journal of Wavelets, Multiresolution and Information Processing, Doi: 10.1142/ (Yayın No: 4463900)

YILMAZ ADİL, KARATAŞ CENGİZ, ÜNAL GAZANFER (2016). Wavelet Based Analysis of Major Real Estate Markets. Journal of Advanced Studies in Finance, 7(2), 107-116. (Yayın No: 4464131)

GENCER MURAT, ÜNAL GAZANFER (2016). CHAOS IN FRACTIONALLY INTEGRATED ASYMMETRIC POWER AUTOREGRESSIVE CONDITIONAL HETEROSKEDASTIC (FIAPARCH) PROCESSES. Ilirias Journal of Mathematics, 5(1), 21-31. (Yayın No: 4464037)

ÜNAL GAZANFER (2015). Stochastic symmetries of Wick type stochastic ordinary differential equations. 01/2015 38:1560079.. International Journal of Modern Physics:Conference Series,

38(1560079), Doi: 10.1142/S2010194515600794 (Yayın No: 4463873)

- ÜNAL GAZANFER (2014). Explicit solution processes for nonlinear dimensional jump diffusion equations. *Journal of Nonlinear Mathematical Physics* , 17(3), 1-12. (Yayın No: 749039)
- ÜNAL GAZANFER (2014). Lie groups in turbulence. *Lie Groups and Their Applications*, 1(2), 98 (Yayın No: 760436)
- BAYRACI SELCUK, ÜNAL GAZANFER (2014). Stochastic interest rate volatility modeling with a continuous time GARCH 1 1 model. *journal of computational and applied mathematics*, 259, 464-473. (Yayın No: 639716)
- TERZİ FDİLEK, ÜNAL GAZANFER, (2013). MULTIFRACTAL BEHAVIOUR IN GOLD PRICES BY USING MF DFAAND WTMM METHODS. *INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES*, 15(1), 108-118. (Yayın No: 769447)
- GÜLBAŞ EZGİ, ÜNAL GAZANFER, (2013). MULTIFRACTAL ANALYSIS OF THE DYNAMICS OF TURKISH EXCHANGE RATE. *INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES*, 15(1), 98-107. (Yayın No: 769578)
- AYTEN KEMAL, ÜNAL GAZANFER, (2013). MULTIFRACTAL BEHAVIOUR IN OIL PRICES BY USING MF DFA AND WTMM METHODS. *INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES*, 15(1), 213-224. (Yayın No: 769256)
- TAŞ CUMHUR, ÜNAL GAZANFER, (2013). MULTIFRACTAL BEHAVIOUR IN NATURAL GAS PRICES BY USING MF DFA AND WTMM METHODS. *INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES*, 15(1), 44 (Yayın No: 769758)
- ÖZDEN ALİ ERİNÇ ÜNAL GAZANFER, (2013). Linearization of second-order jump-diffusion equations. *International. Journal of Dynamics and Control*, 1(1), 60-63. (Yayın No: 4463998)
- ALI DINLER ; ÜNAL GAZANFER (2012). Nonlinear Response of Vibrational Conveyers with Nonideal Vibration Exciter Primary Resonance. *Nonlinear Dynamics*, 69, 1611-1619. (Yayın No: 748169)
- ÜNAL GAZANFER (2012). Nonlinear Response of Vibrational Conveyers with Nonideal Vibration Exciter Superharmonic and Subharmonic Resonance. *Mathematical Problems in Engineering* (Yayın No: 748069)
- KAHRAMAN EMRE, ÜNAL GAZANFER (2012). STEEL PRICE MODELLING WITH LEVY PROCESS. *International Journal of Economics and Finance Studies*, 4(1) (Yayın No: 4551267)
- GENCER MURAT, ÜNAL GAZANFER, (2012). CRUDE OIL PRICE MODELLING WITH LEVY PROCESS. *International Journal of Economics and Finance Studies*, 4(2), 139-148. (Yayın No: 748505)
- YÜCEL SERHAT, ÜNAL GAZANFER, (2012). MORTALITY MODELLING WITH LEVY PROCESSES. *International Journal of Economics and Finance Studies*, 4(2), 119-128. (Yayın No: 748704)
- YILDIRIM YAVUZ i ÜNAL GAZANFER, (2011). Modeling ISE100 with continuous AR 1 model. *International Journal of Economics and Finance Studies*, 3(1), 421-430. (Yayın No: 748879)

- BAYRACI SELÇUK , ÜNAL GAZANFER,(2011). Continuous time GARCH modeling of Turkish interest rates. International Journal of Economics and Finance Studies, 3, 199-208. (Yayın No: 748790)
- ARI YAKUP, ÜNAL GAZANFER, (2011). Continuous modeling of foreign exchange rate of USD versus TRY. International Journal of Economics and Finance Studies,, 3(1), 251-261. (Yayın No: 748936)
- ÜNAL GAZANFER (2008). Exact linearization of one dimensional jump diffusion stochastic differential equations. Nonlinear Dynamics, 51(1), 1-8. (Yayın No: 749280)
- DINLER ALI ,ÜNAL GAZANFER (2008). Exact linearization of Ito equations driven by fBm. Nonlinear Dynamics 53, 251-259. (Yayın No: 749224)
- ÜNAL GAZANFER, SUN JQ (2008). New exact solutions to the Fokker Planck Kolmogorov Equation. Communications in Nonlinear Science and Numerical Experiments, 13, 2051-2059. (Yayın No:749178)
- ÜNAL GAZANFER (2008). Exact time dependent solutions to 1 1 Fokker Planck equation via linearizing transformation of Ito equations. Journal of Nonlinear Mathematical Physics, 15, 211-221. (Yayın No: 749120)
- ÜNAL GAZANFER (2007). Approximate first integrals of a chaotic Hamiltonian system. Quaestiones Mathematicae, 30(1), 483-497. (Yayın No: 758243)
- ÜNAL GAZANFER (2007). Linearization of one dimensional nonautonomous jump diffusion stochastic differential equations. Journal of Nonlinear Mathematical Physics, 14(3), 422-434. (Yayın No: 758151)
- ÜNAL GAZANFER , KHALIQUE MC (2005). Approximate first integrals of the Hénon Heiles system revisited 10 1 73 83. Communications in Nonlinear Science and Numerical Experiments, 10, 73-83. (Yayın No:758423)
- ÜNAL GAZANFER, KHALIQUE MC (2005). Approximate conserved quantities of conservative dynamical systems in  $R^3$ . Quaestiones Mathematicae, 28(3), 305-315. (Yayın No: 758330)
- SUN, JQ , ÜNAL GAZANFER (2005). 2005 A semi discretization method for delayed stochastic systems 10 1 85 94. Communications in Nonlinear Science and Numerical Experiments,, 10(1), 85-94. (Yayın No: 758550)
- ÜNAL GAZANFER, IBRAGIMOV NAIL (2004). Approximate symmetries and conservation laws for Ito and Stratonovich dynamical systems. Journal of Mathematical Analysis and Applications, 297, 152-168. (Yayın No: 758665)
- ÜNAL GAZANFER (2004). Stochastic differential systems Approximate symmetries and conservation laws for. Archives of ALGA, 1, 91-112. (Yayın No: 758760)
- ÜNAL GAZANFER (2004). Symmetries and conserved quantities of stochastic dynamical control systems. Nonlinear Dynamics, 26(4), 309-329. (Yayın No: 758850)
- ÜNAL GAZANFER (2003). Symmetries of Ito and Stratonovich dynamical systems and their conserved quantities. Nonlinear Dynamics, 32, 417-426. (Yayın No: 758955)

- ÜNAL GAZANFER (2003). Approximate first integrals of a Hamiltonian system with two degrees of freedom. *Mathematical and Computational Applications*, 8(2), 151-158. (Yayın No: 759138)
- Khapiro SV, ÜNAL GAZANFER (2002). Group analysis of Karman Howarth equation Part I Submodels. *Communications in Nonlinear Science and Numerical Experiments*, 7(2), 3-18. (Yayın No: 759269)
- GORALI G, ÜNAL GAZANFER (2002). Approximate first integrals of a galaxy model. *Nonlinear Dynamics*, 28(2), 195-211. (Yayın No: 759331)
- Khapiro SV, ÜNAL GAZANFER (2002). Group analysis of the von Kármán-Howarth equation. Part II. Physical invariant solutions. *Communications in Nonlinear Science and Numerical Simulation*, 7(1), 19-30., Doi: 10.1016/S1007-5704(02)00012-6 (Yayın No: 4550532)
- ÜNAL GAZANFER (2001). Approximate first integrals of weakly nonlinear damped driven oscillators with one degree of freedom. *Nonlinear Dynamics*, 26(4), 309-329. (Yayın No: 759411)
- ÜNAL GAZANFER (2000). Approximate generalized symmetries normal forms and approximate first integrals. *Physics Letters A*, 266, 106-122. (Yayın No: 759487)
- ÜNAL GAZANFER (2000). Periodic solutions and approximate symmetries. *Nonlinear Dynamics*, 22(1), 103-112. (Yayın No: 759551)
- ÜNAL GAZANFER (1999). Approximate first integrals of nonlinear oscillators with one degree of freedom. *ARI - An International Journal for Physical and Engineering Sciences*, 51, 258-267. (Yayın No: 759963)
- ÜNAL GAZANFER (1999). Approximate symmetries and conservation laws with applications. *International Journal of Theoretical Physics*, 38(9), 2389-2400. (Yayın No: 759623)
- ÜNAL GAZANFER (1999). Algebraic integrability and generalized symmetries of dynamical systems. *Physics Letters A*, 260, 352-359., Doi: 10.1016/S0375-9601(99)00531-9 (Yayın No: 759684)
- ÜNAL GAZANFER (1997). Probability density functions the rate of entropy change and symmetries of dynamical systems. *Physics Letters A*, 233, 193-202. (Yayın No: 760027)
- ÜNAL GAZANFER (1996). Symmetries integrating factors and Nambu mechanics. *Physics Letters A*, 223, 355-358. (Yayın No: 760105)
- ÜNAL GAZANFER (1994). Application of equivalence transformations to inertial range of turbulence 1 1 232. *Lie Groups and Their Applications*, 1(1), 232 (Yayın No: 760377)
- ÜNAL GAZANFER (1994). Travelling waves exhibiting spatio temporal chaos on the surface of a vertically falling thin film. *International Journal of Engineering Science*, 32(5), 721-742. (Yayın No: 760316)
- ÜNAL GAZANFER (1994). Principal resonances local integrability and chaos in the Kolmogorov Spiegel Sivashinsky equation 30 3 455 472. *International Journal of Engineering Science*,



30(3), 455-472. (Yayın No: 760253)

ÜNAL GAZANFER (1992). Travelling waves and chaos in the Kolmogorov Spiegel Sivashinsky model. International Journal of Engineering Science, 30(5), 593-610. (Yayın No: 760629)

ÜNAL GAZANFER (1992). A local analysis of the Kolmogorov Spiegel Sivashinsky equation. International Journal of Engineering Science, 30(5), 579-592. (Yayın No: 760570)

### **B. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitaplarında (proceedings) basılan bildiriler :**

ÜNAL GAZANFER (2006). Fokker Planck Kolmogorov equations for fBm Derivation and Analytical solutions. Proceedings of 12th conference on Mathematical Physics 2006, 53-61. (/)(Yayın No:761027)

ÜNAL GAZANFER (2002), "Symmetries of stochastic dynamical systems, and Kolmogorov backward and forward equations" 16th conference on Nonlinear Acoustics (Modern group analysis 9) Moscow state univ., Moscow-Russia.

ÜNAL GAZANFER (2000), "Approximate first integrals of weakly nonlinear, damped-driven oscillators with one degree of freedom", Eighth Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures, Virginia-Tech, Blacksburg, Virginia-USA.

ÜNAL GAZANFER ,(1998), "Bayen-Flato Mechanics and symmetries of dynamical systems, Proc. Of the Ninth International Symposium on Continuum models and Discrete systems 29 June- 3 July, Istanbul, World Scientific, 421, (Eds. K.Z. Markov, E. Inan).

S.V: Khabirov and ÜNAL GAZANFER, (1998), ibid , 570

S.V: Khabirov and ÜNAL GAZANFER (1998), Submodels of isotropic turbulence, Proc. Of Interdisciplinary workshops on Symmetry Analysis and Mathematical Modeling, 8-10 December, Mmabtho-Pretoria , South Africa, ISAMM, 86 (Ed. N. H. Ibragimov).

ÜNAL GAZANFER (1997), Constitutive equation of turbulence and the scaling group of Navier-Stokes equations, Proc. Of International Conference on Group Analysis VII, 30 june- 5 july, Nordfjordeid-Norway, Mars Publishers, 317 (Eds. N. H. Ibragimov, K. R: Naqvi and E. Straume).

ÜNAL GAZANFER (1995), Equivalence transformations of the Navier-Stokes equations and the inertial range of turbulence, Proc. Of the Eighth International Symposium on Continuum models and Discrete Systems 11-16 June, Varna-Bulgaria, World Scientific, 480 (Ed. K.Z. Markov).

### **C. Yazılan ulusal/uluslararası kitaplar veya kitaplardaki bölümler:**

C2. Yazılan ulusal/uluslararası kitaplardaki bölümler:

CRC Handbook of Lie group analysis of differential equations volume 2, Bölüm adı:(Application of equivalence transformations to inertial subrange of turbulence.) (1995)., ÜNAL GAZANFER,

CRC Press, Editör:N. H. Ibragimov, İngilizce(Bilimsel Kitap), (Yayın No: 760830)

D. Ulusal hakemli dergilerde yayımlanan makaleler :

1. ÜNAL GAZANFER (2014). Equivalence transformations of Navier Stokes equations. Bulletin of Istanbul Technical University, 47(1), 203-207. (Kontrol No: 760487)

2. ÜNAL GAZANFER (1996). On the uncertainty of propositions in the combined body of evidences. Bulletin of Istanbul Technical University, 49(3), 365-374. (Kontrol No: 760195)

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