

## Ayşe Hümeysra BİLGE

### ÖZGEÇMİŞ

Adı: Ayşe Hümeysra Bilge  
Doğum Yeri ve Tarihi: İstanbul, 1954  
İş Adresi: Kadir Has Üniversitesi  
Mühendislik ve Doğa Bilimleri Fakültesi  
Endüstri Mühendisliği Bölümü  
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#### Akademik Dereceleri:

Profesör: 1998 (İ.T.Ü. Matematik Bölümü).  
Doçent: Ekim 1990, (Matematiksel Fizik).  
Doktora: Matematik, Aralık 1993,  
University of Minnesota, Minneapolis, Minnesota USA.  
Fizik, Ekim 1985, Orta Doğu Teknik Üniversitesi, Ankara.  
Matematik (M.A.), Ocak 1986.  
Yüksek Lisans:  
State University of New York (SUNY) at Stony Brook,  
Stony Brook, New York, USA.  
Elektrik Mühendisliği (M.Sc.), Nisan 1980.  
Orta Doğu Teknik Üniversitesi, Ankara  
Elektrik Mühendisliği, Mayıs 1978.  
Orta Doğu Teknik Üniversitesi, Ankara  
Lise: Notre Dame de Sion, 1973, İstanbul.

#### Mesleki Deneyimi:

Mart 2010- Kadir Has Üniversitesi, Mühendislik ve Doğa Bilimleri  
Fakültesi (Profesör)  
Eylül 1997-Şubat 2010 İ.T.Ü. Fen Edebiyat Fakültesi, Matematik Bölümü, İstanbul  
(1997-1998, Doçent, 1999-Profesör).  
Haziran 1995-Eylül 1997: TÜBİTAK Marmara Araştırma Merkezi, Gebze, Kocaeli  
Temel Bilimler Araştırma Enstitüsü,  
Matematik Bölümü (Araştırma Uzmanı)  
Ocak 1996-Haziran 1996: Bilkent Üniversitesi, Fen Fakültesi, Ankara  
Matematik Bölümü, (Misafir Doçent).  
Mayıs 1994-Haziran 1995: Anadolu Üniversitesi, Fen Fakültesi, Matematik Bölümü,  
Eskişehir (Doçent).  
Ağustos 1991-Mayıs 1994: TÜBİTAK Marmara Araştırma Merkezi, Gebze, Kocaeli  
Temel Bilimler Araştırma Enstitüsü,  
Matematik Bölümü (Araştırma Uzmanı)  
Eylül 1989-Temmuz 1991: University of Minnesota, Minneapolis, USA.  
(Matematik Bölümü-Eğitim Asistanı).  
Eylül 1986-Mayıs 1988: SUNY at Stony Brook, New York, USA.  
(Matematik Bölümü-Eğitim Asistanı).  
Aralık 1985-Ağustos 1986: University of Alabama, Birmingham, USA.  
(Fizik Bölümü-Öğretim Görevlisi).  
Haziran 1980-Ağustos 1984: Orta Doğu Teknik Üniversitesi, Ankara.  
(Fizik Bölümü-Eğitim Asistanı).

**Araştırma Konuları:**

- Einstein denklemlerinin geometrik formülasyonu ve çözüm üretme teknikleri; Genel rölativitede tam çözümler, Kerr-Schild metrikleri.
- İntegre edilebilir sistemlerin sınıflandırılmaları, simetrileri ve rekürsiyon operatörleri, tekil, çözümleri.
- Ayar teorilerinde dualite tanımları, self-dual Yang-Mills denklemlerinin yüksek boyutlara genellemeleri.
- Zaman serileri analizi, modelleme ve kestirim; Uygulamalar: Ionosferik kritik frekanslar, elektrik tüketim verisi; finasal veri.
- Salgın hastaların yayılım modelleri, jelleşme modellerine uygulamalar.
- -Sonlu metrik uzayların sınıflamaları

**Son 2 Yılda Verdiği Dersler:**

**Lisansüstü:** Finans Matematiği, Zaman Serileri Analizi, Risk Yönetiminde Simülasyon Yöntemleri, Çok Değişkenli, İstatistik Yöntemler, İleri Düzey Eniyileme ve Uygulamaları.

**Lisans:** Matematik 1-2, Diferansiyel Denklemler, Finans Mühendisliğinde Simülasyon Teknikleri

**Yönettiği Lisansüstü Tezler:****Yüksek Lisans:**

1. Eti Mizrahi, Modeling and Parameter Estimation for Stochastic Processes Superimposed on Periodic Signals, İstanbul Teknik Üniversitesi, 2001.
2. Selman Uğuz, Spin c Structures on 8-manifolds, İstanbul Teknik Üniversitesi, 2003.
3. Yalçın Kumbasar, Canonical Forms for a Family of Anticommuting Diagonalizable Operators, İstanbul Teknik Üniversitesi, 2010.
4. Özen Özer, Sabit Oranlı Portföy Sigortalama Stratejisinde Sabit Çarpanın Fiyat/Kazanç Oranı Yardımı ile Belirlenmesi ve Bir Uygulama, Kadir Has Üniversitesi, 2014.
5. Merve Genç Yılmaz, Finansal Piyasalarda Karanlık Havuzlar ve Optimal Stratejiler, Kadir Has Üniversitesi, 2016.
6. Ergün Yükseltan, Türkiye Elektrik Enerjisi Tüketiminin Zaman Serileri ile Analizi, Kadir Has Üniversitesi, 2016.
7. Gizem Gayretli, Türkiye Elektrik Piyasasında Tahminlerin Fiyata Etkisi ve İkili Anlaşma Kullanım Miktarının Hesaplanması, Kadir Has Üniversitesi, 2017 (Eş Danışma: Doç.Dr. Ahmet Yücekaya).
8. (Eş Danışman olarak) Selim Önay, Elektrik Piyasası Arz ve Talep Gelişimi: Türkiye Uygulaması, Kadir Has Üniversitesi, 2017
9. Cansın Memiş, İkili Alım Satım Yöntemlerinin İstanbul Borsası Hisse Senedi Piyasasında Uygulanabilirliğinin Araştırılması, Kadir Has Üniversitesi, 2017.
10. Ozan Yeniay, Borsa İstanbul Bankacılık Endeksinin Bankacılık Hisseleri ile İlişkisi ve Bankacılık Hisse Senetleri Özelinde Alım Satım Stratejileri Üzerine Bir Uygulama, Kadir Has Üniversitesi, 2017.

**Doktora:**

1. Durmuş Dağhan, Ricci-düz Lorentz Manifoldlarında Tam ve YaklaşıkÇözümler, İstanbul Teknik Üniversitesi, 2006.
2. Eti Mizrahi, Towards the Classification of Scalar Integrable Evolution Equations in (1+1) Dimensions, İstanbul Teknik Üniversitesi, 2008.
3. Selman Uğuz, (3+3+2)Warped-like Product Manifolds with Spin(7) Holonomy, İstanbul Teknik Üniversitesi, 2008.
4. Gülcen Özkum, Beşinci Mertebeden (1+1)-Boyutta Skaler Evrim Denklemlerinin Sınıflandırılması, İstanbul Teknik Üniversitesi, (Eş Danışman: Prof.D.r Emanullah Hızel), 2010

**Yürüttüğü Araştırma Projeleri**

TÜBİTAK-ARDEB (1001): Yüksek Boyutlu Manifoldlarda Self-Dualite (2007-2009)  
TÜBİTAK-ARDEB (1001): Sonlu metrik uzaylar ve filogenetik uygulamaları (Mart 2019,  
sure 2 yıl)

**Kazanılan Burs ve Ödüller:**

TÜBİTAK-DFG Bursu, 1995.  
TÜBİTAK Teşvik ödülü, 1992.  
Fulbright Doktora Bursu, 1984-1985.  
TÜBİTAK Lise ve Lisans Bursu, 1971-1975.

**Düzenleme Kurulunda Bulunduğu Toplantılar**

Quantization, Dualities and Integrable Systems (2005-2016)  
TUBITAK-ITU Yaz Okulları (2006,2007,2009)

**Hakemlik Yaptığı Dergiler**

Classical and Quantum Gravity; Journal of Physics A; Nonlinearity; Turkish Journal of Mathematics

## Ayşe Hümeysra BİLGE

### List of Publications

#### Articles listed in SCI

- 1.** Bilge A.H. and M. Gürses,  
"Adding a  $\lambda$ -term top p-wave solutions of Einstein's field equations",  
Lecture Notes in Physics, 180:256-257 (1983)  
WOS:A1983QU56300032  
(Published originally as refereed conference paper: *XIth International Colloquium on Group Theoretical Methods in Physics*, Ed. M. Serdaroglu and E. İnönü Springer, Berlin, 1982).
  
- 2.** Bilge, A.H. and M. Gürses,  
"Generalized Kerr-Schild Transformation",  
Lecture Notes in Physics, 180:252-255 (1983)  
WOS:A1983QU56300031  
(Published originally as refereed conference paper: *XIth International Colloquium on Group Theoretical Methods in Physics*, Ed. M. Serdaroglu and E. İnönü Springer, Berlin, 1982).
  
- 3.** Bilge, A.H. and Gürses  
"Cartan ideal, prolongation and Backlund transformations for Einstein's equations",  
Journal of Mathematical Physics, vol. 27 (7): 1819-1833 (1986).  
WOS:A1986C869000016
  
- 4.** Kupeli, A.H.,  
"Vacuum solutions admitting a geodesic null congruence with shear proportional to expansion",  
Journal of Mathematical Physics, vol. 29 (2): 440-442 (1988).
  
- 5.** Kupeli, A.H.,  
"Generalized Kerr-Schild transformation from vacuum backgrounds to Einstein-Maxwell spacetimes",  
Classical and Quantum Gravity, vol. 5 (3): 401-408 (1988).
  
- 6.** Bilge, A.H.,  
"Non-twisting vacuum metrics with  $D(\sigma / \rho) = 0$ ",  
Classical and Quantum Gravity, vol. 6 (6): 823-844 (1989).  
WOS:A1989AA37600007
  
- 7.** Bilge, A.H.,  
"An asymptotically flat vacuum solution",  
General Relativity and Gravitation, vol. 22 (4): 365-377 (1990).  
WOS:A1990CZ33700001
  
- 8.** Bilge, A.H.,

”Integration of radial NP equations in terms of  $\rho$   $\sigma$  and  $\xi^k$  “,  
Classical and Quantum Gravity, vol. 8 (4): 703-725, (1991).  
WOS:A1991FG46500015

**9.** Bilge, A.H.,

”Integrability of 7th order KdV-like evolution equations using formal symmetries and perturbations of conserved densities”,  
Journal of Mathematical Physics, vol. 33 (9): 3025-3038, (1992).

WOS:A1992JK56800009

**10.** Bilge, A.H.,

”A REDUCE program for the integration of differential polynomials”,  
Computer Physics Communications, vol. 71(3): 263-268 (1992).

WOS:A1992JR79000005

**11.** Bilge, A.H.,

”On the equivalence of linearization and formal symmetries as integrability tests for evolution equations”,

Journal of Physics A: Mathematical and General, vol 26 (24): 7511-7519 (1993).

WOS:A1993MQ33300024

**12.** Bilge, A.H., T. Dereli and Ş. Koçak,

”Self-dual Yang-Mills fields in eight dimensions”,

Letters in Mathematical Physics, vol. 36 (3): 301-309 (1996).

WOS:A1996TY84900008

**13.** Bilge A.H., M.Hortaçsu and N.Özdemir,

”Particle creation if a cosmic string snaps”,

General Relativity and Gravitation, vol. 28 (5): 511-525, (1996).

WOS:A1996UG61500001

**14.** Bilge, A.H.,

”Singular traveeling wave solutions of the fifth order KdV, Sawada-Kotera and Kaup equations”,

Journal of Physics A: Mathematical and General, vol. 29(16): 4967-4975, (1996).

WOS:A1996VE81100018

**15.** Bilge, A.H.,

”Solution and ellipticity properties of self-duality equations of Corrigan et al in eight dimensions”,

International Journal of Theoretical Physics, vol. 35 (12): 2507-2515, (1996).

WOS:A1996VY93300011

**16.** Bilge, A.H., T. Dereli and Ş. Koçak,

”The geometry of self-dual two-forms”,

Journal of Mathematical Physics, vol. 38 (9): 4804-4814, (1997).

WOS:A1997XW13200030

**17.** Bilge, A.H., M.Hortaçsu and N.Özdemir,

”Can an Unruh detector feel a cosmic string?”,

General Relativity and Gravitation, vol. 30 (6): 861-877, (1998).

WOS:000073833000002

**18.** Bilge, A.H., T. Dereli and Ş.Koçak,

”Monopole equations on 8-manifolds with Spin(7) holonomy”,

Communications in Mathematical Physics, vol. 203, 21-30, (1999).

WOS:000080690600002

**19.** Bilge, A.H., and Y.K. Tulunay,

”A novel on-line method for single station prediction and forecasting of the ionospheric critical frequency  $f_0F2$  1 hour ahead”,

Geophysical Research Letters, vol. 27 (9): 1383-1386, (2000).

WOS:000086748600037

**20.** Bilge, A.H., T.Dereli, Ş.Koçak,

”Seiberg-Witten type monopole equations on 8-manifolds with spin(7) holonomy, as minimizers of a quadratic action”,

Journal of High Energy Physics, vol. 4, art no: 003 (April 2003)  
000183526800003

**21.** Tulunay, E., E.T. Senalp, L. Cander, Y. Tulunay, A.H. Bilge, E. Mizrahi, S.S.

Kouris, N. Jakowski,

”Development of algorithms and software for forecasting, nowcasting and variability of TEC”,

Annals of Geophysics, vol. 47 (2-3), 1201-1214 Suppl. S, (2004).

WOS:000224826100018

**22.** Daghan, D and A.H. Bilge,

”An exact solution for static scalar fields coupled to gravity in (2+1)-dimensions”,

General Relativity and Gravitation, vol 37, (7), pp.1289-1296, (2005).

WOS:000230565600010

**23.** Bilge, A.H.,

”Towards the classification of scalar non-polynomial evolution equations: Quasilinearity”,

Computers and Mathematics with Applications, vol. 49, pp.1837-1848, (2005).

WOS:000230983300017

**24.** Bilge, A.H., S. Kocak and S. Uguz

”Canonical bases for real representations of Clifford algebras”,

Linear Algebra and its Applications, vol, 419, pp.417-439, (2006).

WOS:000242744000010

**25.** Bilge, AH. and D. Daghan

”Scalar fields coupled to gravity in (3+1) dimensions: Static spherically symmetric stiff matter solutions”

Journal of Mathematical Physics, vol 48 (10), Art. No: 102503 OCT 2007

WOS:000250589500018

**26.** E. Mizrahi and A.H. Bilge

"Towards the classification of scalar non-polynomial evolution equations: polynomiality in top three derivatives" Studies in Applied Mathematics, Vol.123, No.2, pp.233-255, (2009).

WOS:000270190700001

**27.** A.H. Bilge, T. Dereli and S. Kocak

“Maximal linear subspaces of strong self-dual 2-forms and the Bonan 4-form”, Linear Algebra and its Applications, Vol. 434, No 5, pp.1200-1214, March 2011

WOS:000286720700002

**28.** S. Uguz and A.H. Bilge

“(3+3+2) warped-like product manifolds with Spin(7) holonomy”, Journal of Geometry and Physics, Vol 61, Issue 6, pp. 1093-1103, June 2011

WOS:000290005700011

**29.** Y. Kumbasar and A.H. Bilge

“Canonical forms for families of anti-commuting diagonalizable linear operators”, Linear Algebra and its Applications, Vol. 436, Issue 1, pp. 79-85, (January 2012).

WOS:000297431200008

30. A.H. Bilge, O. Pekcan and M.V. Gurol

“Application of epidemic models to phase transitions”, Phase Transitions, Vol. 85, Issue 11, pp. 1009-1017 (2012).

WOS:000310307300006

31. G. Ozkum and A.H. Bilge

“On the classification of fifth order quasi-linear non-constant separant scalar evolution equations of the KdV type”, Journal of the Physical Society of Japan, Vol 81, Issue 5, Article Number 054001, (May 2012).

WOS:000303244800005

32. E. Mizrahi, A.H. Bilge

“‘Level grading’ a new graded algebra structure on differential polynomials: Application to the classification of scalar evolution equations”, Journal of Physics A-Mathematical and Theoretical, Vol. 46, Issue 38, Article Number 385202 (September 2013)

WOS:000324073500005

33. A.H. Bilge and O. Pekcan

“A mathematical description of the critical point in phase transitions”, International Journal of Modern Physics C, Vol. 24, Issue 10, Article Number 1350065 (October 2013).  
WOS:000324541100001

34. A.H. Bilge, F. Samanlioglu and O. Ergonul,

“On the uniqueness of epidemic models fitting a normalized curve of removed individuals”

Journal of Mathematical Biology, Vol 71, No 4, pp 767-794 (Oct 2015).

WOS:000360851700001

35. F. Samanlioglu and A.H. Bilge,

“An Overview of the 2009 A(H1N1) Pandemic in Europe: Efficiency of the Vaccination and Healthcare Strategies”

Journal of Healthcare Engineering, Article Number:5965836 Published:2016.

WOS:000373150800001

36. A.H. Bilge and E. Mizrahi, E,

“On the classification of scalar evolution equations with non-constant separant”

Journal of Physics A- Mathematical and Theoretical, Vol 50, Article Number 035202, (2017)

WOS:000390820600002

37. E. Yukseltan, A. Yucekaya, A.H. Bilge

“Forecasting electricity demand for Turkey: Modeling periodic variations and demand segregation”

Applied Energy, Vol. 193, pp 287-296, (2017)

WOS:000398871400023

38. A.H. Bilge, D. Celik, D, S. Kocak

“An equivalence class decomposition of finite metric spaces via Gromov products”

Discrete Mathematics, Vol. 340, pp. 1928-1932, (2017)

WOS:000402211100016

39. A.H. Bilge and F. Samanlioglu,

“Determination of epidemic parameters from early phase of fatality data: A case study of 2009A(H1N1) pandemic in Europe”

International Journal of Biomathematics, Vol 11, Issue 2, Article Number 1850021, (February 2018)

40. A.S. Ogrenici, O Pekcan, S Kara, AH Bilge

“Mathematical characterization of thermo-reversible phase transitions of agarose gels”

Journal of Macromolecular Science Part B, Vol 57, No 5, pp364\*376 (2018)

41. A.H. Bilge, AS Ogrenici, O Pekcan,

Mathematical models for phase transitions in biogels, vol. 33, No 9, Art. 1950111, (2019)

## Articles not listed in SCI

**1.** Bilge, A.H.,

“A system with a recursion operator but one higher symmetry”,  
Lie Groups and their Applications, vol. 1, 132-139 (1994).

**2.** Bilge, A.H. and Y.K. Tulunay,

“Spectral analysis of geomagnetic data from Kandilli Observatory, Istanbul”,  
Annali di Geofisica, vol. 40, (6), 1591-1598 (1997).

**3.** F.Özdemir and A.H. Bilge,

“Self-duality in dimensions  $2n > 4$  : equivalence of various definitions and the derivations of the octonionic instant on solution”,  
ARI, vol. 51, 247-253, (1999).

4. E. Yukseltan, A. Yucekaya and A.H. Bilge  
 "Forecasting electricity demand for Turkey, using modulated Fourier Expansion"  
 American Scientific Journal for Engineering, Technology and Sciences, Vol 14, No. 3,  
 pp.87-94 (2015)
5. A.H. Bilge, D. Celik and S. Kocak,  
 "Optimal embeddings of finite metric spaces into graphs"  
 Anadolu University Journal of Science and Technology B- Theoretical Science  
 Vol. 3, No 2, (2015)
6. Bilge AH, Y Ozdemir  
 "The critical point of a sigmoidal curve "  
 Studia Universitatis Babeş-Bolyai Mathematica (Yayına kabul edildi)

### **Proceedings papers listed in SCI**

1. Mizrahi, E., A.H.Bilge, Y.Tulunay,  
 "Statistical properties of the deviations of  $f_0F2$  from monthly medians",  
 Annals of Geophysics(Annali di Geofisica), vol. 45, (1), 131-143, (2002).  
 WOS:000177675600014
2. Bilge, A.H., E.Mizrahi, Y.Tulunay,  
 "Variation of the feedback coefficient with  $R_{12}$  and the geographic latitude in 1-h ahead forecast of  $f_0F2$ ",  
 Annals of Geophysics(Annali di Geofisica), vol. 45, (1), 87-95, (2002).  
 WOS:000177675600008
3. Daghan D, Bilge AH,  
 "Scalar field coupled to gravity in spherically symmetric background in (2+1) dimensions"  
 Century of Relativity Physics Book Series: AIP Conference Proceedings, vol. 841  
 pp:637-638 (2006)  
 (Conference Information: 28th Spanish Relativity Meeting, SEP 06-10, 2005 Oviedo,  
 SPAIN)  
 WOS:000239410700093
4. Bilge AH, Uguz S,  
 "A generalization of warped product manifolds with Spin(7) holonomy",  
 Geometry and Physics XVI International Fall WorkshopBook Series:AIP Conference  
 Proceedings, vol. 1023, pp:165-171 (2008)  
 (Conference Information: 16th International Fall Workshop on Geometry and Physics,  
 SEP 05-08, 2007 Lisbon, PORTUGAL)  
 WOS:000257509100017
5. Bilge, A.H. and D. Dağhan,  
 "Warped product metrics with rank-1 Ricci tensor"  
 Spanish Relativity ,Meeting, ERE2007: Relativistic Astrophysics and Cosmology:Book  
 Series: EAS Publication Series volo.30,pp: 329-332 (2008).

(Conference Information: 30th Spanish Relativity Conference, SEP 10-14, 2007 Inst  
Astrofis Canarias, Tenerife, SPAIN)  
WOS:000262047700055

6. Bilge, A. H.; Pekcan, O.

“A mathematical characterization of the gel point in sol-gel transition”

Edited by: Vagenas, EC; Vlachos, DS; Bastos, C; et al.

Conference: 3rd International Conference on Mathematical Modeling in Physical Sciences  
(IC-MSQUARE) Location: Madrid, SPAIN Date: AUG 28-31, 2014

3RD INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELING IN  
PHYSICAL SCIENCES (IC-MSQUARE 2014) Book Series: Journal of Physics

Conference Series Volume: 574 Article Number: 012005 Published: 2015

WOS:000352595600005

7. Bilge, A.H.,

“On the uniqueness of the octonionic instanton solution on conformally flat 8-manifold”.

Edited by: Burdik, C; Navratil, O; Posta, S, Conference: 23rd International Conference on  
Integrable Systems and Quantum Symmetries (ISQS) Location: Prague, CZECH  
REPUBLIC Date: JUN 23-27, 2015

Sponsor(s): Czech Tech Univ, Fac Nucl Sci & Phys Engn

XXIII INTERNATIONAL CONFERENCE ON INTEGRABLE SYSTEMS AND  
QUANTUM SYMMETRIES (ISQS-23) Book Series: Journal of Physics Conference  
Series Volume: 670 Article Number: UNSP 012011 Published: 2016

WOS:000382083700011

8. Bilge, AH, Ozdemir, Y,

“Determining the Critical Point of a Sigmoidal Curve via its Fourier Transform”

Ed. Vagenas, EC, Vlachos, DS

5TH INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELING IN  
PHYSICAL SCIENCES (IC-MSQUARE 2016)

Journal of Physics Conference Series , 5th International Conference on Mathematical  
Modeling in Physical Sciences (IC-MSquare) MAY 23-26, 2016, Athens, GREECE  
Vol. 738, 10.1088/1742-6596/738/1/012062 (2016).

WOS:000403403900062

9. Bilge, AH, Kirkil, G, Burak, S, Incegul, M,

“Modeling of Wind Effects on Stratified Flows in Open Channels: A Model for the  
Istanbul Strait (Bosphorus)”

Ed. Vagenas, EC, Vlachos, DS

5TH INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELING IN  
PHYSICAL SCIENCES (IC-MSQUARE 2016), Journal of Physics Conference Series  
CT 5th International Conference on Mathematical Modeling in Physical Sciences (IC-  
MSquare), MAY 23-26, 2016, Athens, GREECE, Vol 738, 10.1088/1742-  
6596/738/1/012069, (2016).

WOS:000403403900069

10. Bilge, AH, Dereli, T, Kocak, S,

“Self-duality in higher dimensions”

XXIV INTERNATIONAL CONFERENCE ON INTEGRABLE SYSTEMS AND  
QUANTUM SYMMETRIES (ISQS-24), Journal of Physics Conference Series, 24th

International Conference on Integrable Systems and Quantum Symmetries (ISQS), CY  
JUN 14-18, 2016, Prague, CZECH REPUBLIC, Czech Tech Univ Prague, Fac Nucl Sci &  
Phys Engn, Joint Inst Nucl Res, Bogoliubov Lab Theoret Phys, Vol. 804, 10.1088/1742-  
6596/804/1/012005 ( 2017)  
WOS:000404045600005

## Other Proceedings Papers

- 1.** Gürses, M. And A.H. Bilge,  
"The Cartan ideal, prolongation, and Painleve property of the Einstein field equations",  
Proceedings of the Fourth Marcel Grossmann Meeting on General Relativity, Ed. R.  
Rufini (Elsevier, 1986).
- 2.** Bilge, A.H., T. Dereli, Ş. Koçak,  
"The geometry of self-dual gauge fields",  
Proceedings of the 9<sup>th</sup> Max Born Symposium, Karpacz, Poland 25-27 September 1996,  
"New Symmetries in the Fundamental Inreactions Theory" Ed. J. Lukierski and A.  
Jadczyk, (PWD Polish Scientific Publishers, Warsaw, 1997).
- 3.** Bilge, A.H., T. Dereli and Ş. Koçak,  
"Seiberg-Witten equations on  $R^8$ ",  
Proceedings of the 5<sup>th</sup> Gökova Geometry-Topology Conference, Turkish Journal of  
Mathematics, vol. 21, (1), 87-91, (1997).
- 4.** Bilge, A.H., T. Dereli and Ş. Koçak,  
"Self-dual gauge fields in eight dimensions",  
Proceedings of the Barut Memorial Conference on Group Theory in Physics, Turkish  
Journal of Physics, vol. 21, 361-367 (1997).
- 5.** Mizrahi, E. and A.H.Bilge,  
"İonosferik kritik frekans  $f_0F2$  verisinin istatistik incelenmesi",  
D.I.E. İstatistik Araştırma Sempozyumu 2000, Bildiriler Kitabı, 335-337, (2000).
- 6.** Bilge, A.H., T.Dereli, Ş.Koçak,  
"Monopole equations on 8-manifolds with Spin(7) holonomy: An overview of the energy  
integral",  
Proceedings of Institute of Mathematics of NAS of Ukraine, (2004)
- 7.S.Burak, A.H. Bilge, D.Dernek,  
"A network model simulation proposal for river basin management plans (RBMPs) in  
Turkey"  
European Water 57: 231-236 (2017)