CV

PERSONAL DETAILS

Name: Abdul Hamid Kara

Date and Place of Birth: 26 August 1961 -- Germiston

Nationality: South African

Residential Address: 28 Camberley Road, Robertsham, Johannesburg, 2019

QUALIFICATIONS

Academic Qualifications:

BSc (1979-1981, graduated 1982)
Honours (1982, graduated 1983)
MSc (1986-1987, graduated 1987)
PhD (1991-1994, graduated 1994)

Professional Qualifications:

HDipEd (Postgraduate) (1983)
Credits obtained for topics from MEd (1985):
(i). Meta-theory
(ii). Curriculum Development

Masters Programme:

Coursework and Dissertation
Title: The Helmholtz Equation in Three Dimensional Space
Supervisor: Prof M Faierman (Wits)
Coordinator: Prof G Roach (Strathclyde, Scotland)

PhD Programme:

Title: On Lie and Noether Symmetries of Differential Equations
Supervisor: Dr F M Mahomed (Wits)

WORK EXPERIENCE

Work Experience:

1. Teacher (1984) -- William Hills Secondary (Benoni)
2. Junior Lecturer (1985-1986)
3. Senior Tutor (1987-May 1994)
4. Lecturer (June 1994-December 1994)
5. Senior Lecturer (January 1995-September 2001)
6. Associate Professor (October 2001-May 2005)
7. Professor (May 2005-present) -- Wits University

Undergraduate teaching/tutoring:

1. First and second year science
2. First to third year engineering
3. First year architecture
4. Teacher training for HDipEd (video classes)

Honours:

1. Teaching of honours (fourth year) course: Calculus of Variations, 1995, 1996, 1997, 1998, 1999 –present, Symmetries and conservation laws, 2011,2012

MSc:

1. Calculus of variations: 1998, 1999

POSTGRADUATE SUPERVISION

Supervision PhD:

1. O Narain, 2000, completed 2005
2. G Johnpillai, 2000 , completed 2002
3. A Davison, 2001, completed 2004
4. R Narain, 2009 completed 2011
5. R Morris, 2011, completed 2013
6. S Jamal, 2011, completed 2013
7. P. Masemola, 2012, completed 2013
8. M K Folly-gbetoula, 2013, completed 2015
9. J Basingwa, 2015
10. Siphamandla 2016, (cosupervision)

Supervision MSc:

1. S Ngubane 2004, completed 2005
2. S Motsaanaka 2004, completed 2005
3. O Bayinder (Univ Jhb) 2003, completed 2005
4. A Davison 1999, completed 1999
5. K Morris, 2001 , completed 2001
6. S Currie ,2002 (joint) completed 2002
7. K Goitesemodimo, 2002, completed 2003
8. R Ito Kiguwa, 2002 completed 2003
9. R Narain, 2008 completed 2009
10. R Morris, 2010 completed 2011
11. S Jamal, 2010 completed 2011
12. N Wilson, 2011, completed Jan 2012
13. P. Masemola, 2011, completed Jan 2012
14. M K Folly-gbetoula, 2012, completed Jan 2013
15. S. Lepule, 2013, (cosupervision), completed July 2014
16. L. Ndlovu, 2013, (cosupervision), completed 2013
17. T. Pidane 2016, (cosupervision)
18. Agreement 2016, (cosupervision)

Supervision of some Honours projects:

1. J Jalal (COMSATS IIT, Islamabad)
2. A. Gazanfer (COMSATS IIT, Islamabad)
3. A Ahmed (COMSATS IIT, Islamabad)
4. R Narain (Wits)
5. T. Phidane

ADMINISTRATIVE EXPERIENCE

1. Coordinator for mathematics in the Faculty of Architecture (6 years)
2. Member on the board of the Faculty of Architecture (1988-1993)
3. Member on the organizing committee of the `International Conference on Group Analysis: Theory and Application in Mathematical Modelling, Wits University, 16 -- 22 January 1994'. This conference had participants from a number of countries such as Russia, Ukra-ine, USA, Italy, Cyprus and India. Some of the memebers of the Scientific committee were: Anderson R L (Athens, Georgia, USA), Herbst B (SA), Ibragimov N H (Chairman, Moscow, Russia -- Istanbul, Turkey), Leach P G L (SA), Mahomed F M (Co-chairman, SA), Mason D (SA), Olver (Minneapolis, USA), Ovsiannikov L (Novosibirsk, Siberia, Russia), Rogers C (UK -- New South Wales, Australia), Torrisi M (Sicily, Italy).
4. Participation in the Regional Science Week for school pupils in the mathematical sciences.
5. Coordinator for Mathematics II for July 1995-Jan 1996.
6. Coordinator for computer matters in the mathematics department.
7. Undergarduate teaching involved teaching and tutoring at first, second and third year levels. This activity is/was carried out in the faculties of science, engineering and architecture.
8. Coordinator for Math Honours, Jan 1996-Dec 1999.
9. Member on the organizing committee of the `International conference on Modern Group Analysis VI - Wits University, 15 -- 20 January, 1996'.
10. Member on the organizing committee of the `Fourth Workshop on Differential Equations and Chaos - Wits University, 12 -- 13 January, 1996'.
11. Member of the Governing Committee of the Math Dept., 1998.
12. Organizing workshops in Differential Equations (e.g., September 1999 with participation from Universities of Northwest and Natal) to promote various aspects (like symmetry based methods).
13. Member of the Science Faculty Board 1998, 2000, 2001.
14. Member of the Math Sciences Committee, 1999, 2000.
15. External examining done for departments from other universities such as University of Northwest (in second, third and honours year topics).
16. Member of Graduate Students Committee, 2001-2006
17. Member of the Executive Committee of the School of Mathematics, 2001/2002/2004/2005/2007/2008/2009/2010/2011.
18. Lecturer Member of Senate of Wits University, 2002/2003.
19. (i) Member of Senate, 2007, (ii) Member of Senate International policy committee, 2008-2011 (iii) Member of Senate International policy committee, 2014.

20. Member on the organizing and scientific committee of the Euler Tercentenary Workshop, August 2007 (**one of two editors of the proceedings** to appear in Journal of Nonlinear Mathematical Physics).
21. Acting head of School of Mathematics on a number of occasions between 2009 and present.
22. Deputy head of School – January 2015 –December 2015

23. Joint organizer of special session (nonlinear differential equations), ICNPAA, Vienna, July 2012
24. Member of Faculty of Science promotion and appointments committee 2014-
25. African Institute of Mathematics ASSOCIATE RESEARCH FELLOW, August 2015-
26. Joint organizer of special session (symmetry and geometry) SAMS, Wits, November 2015

PROFESSIONAL RECOGNITION

Membership of professional bodies:

1. NRF rating: B3
2. South African Mathematical Society (and Secretary: 2008-2011)
3. Centre for differential equations, continuum mechanics and applications, Wits University
4. Pakistan Maths Society

Award(s):

1. South African Maths Society gold medal award for International Year of Mathematics 2000
2. Adjunct professor, KFUPM, Dhahran, September 2014-

Other activities:

1. Served on selection committees for staff in the faculty of science.
2. Served on selection committees for staff in the department of mathematics.

3. Reviewed/refereed articles for internationally recognized journals/proceedings such as Physics Letters, Journal of Applied Maths and MOGRAN VI/VII (see below), Mathematical and Computer Modeling, inter alia.
4. AIMS, Muizenberg, Nov-Dec 2013, research visit.

Talks delivered at conferences:

1. Pretoria University, SAMS October 1991, `The Noether Equivalence Problem'
2. University of Cape Town, SAMS October 1992, `On the generalized Emden Equation'
3. University of Cape Town, Workshop on Chaos and Dynamics January 1993, `Equivalent Lagrangians and the Inverse Problem in the Calculus of Variations'
4. University of Natal (Pmb), SAMS October 1993, `Application of Noether's Theorem'
5. Wits University, International Conference on Modern Group Analysis January 1994, `Symmetries associated with first integrals and the inverse Problem in the Calculus of Variations'
6. University of Port Elizabeth, SAMS October 1994, `Symmetries of p.d.e.s and the inverse problem'
7. University of Bahrain, ICPAM95 November 1995, `Alternative Lagrangians for p.d.e.s'
8. University of Durban-Westville, SAMS October 1995, `The complete classification of first-order Lagrangians'
9. University of the Witwatersrand, International Conference on Modern Group Analysis: Mogran VI, January 1996, `New identities relating the Euler-Lagrange, Lie-Backlund and Noether operators'
10. University of the Western Cape, SAMS November 1996, `Some new ideas on symmetries of first integrals of p.d.e.s'
11. Sophus Lie Conference Centre (Nordfjordeid, Norway) June/July 1997 `The connection between Lie-Backlund symmetries and conservation laws of partial differential equations'
12. Rand Afrikaans Univeristy, SAMS June 1998, `Symmetries and conservation laws'
13. University of the Western Cape, PACOM January 2000, `Conservation laws of perturbed wave equations'
14. Quaid-i-azam University, Islamabad, Pakistan, Symposium on Applications of Group Theory: `Some ideas on conservation laws for perturbed equations' & `Construction of approximate Lagrangians using symmetries and first integrals'
15. Universidade de Vigo, Vigo, Spain, Colloquium on Lie Tie Theory and Applications (17 July 2000 - 22 July 2000) `Conservation faws from nonlocal (potential) symmetries'

16. University of Stellenbosch, SANUM2001, April 2001, `Potential symmetry generators of equations with a small parameter'
17. University of Durban-Westville, SAMS, November 2001,`Group theoretic methods for approximate invariants'
18. Selcuk University, Konya, Turkey, Third International Conference on Mathematical and Computational Applications, 4-6 September 2002, `Potential Symmetry Generators of Some Perturbed Nonlinear Evolution Related Equations'
19. COMSATS Institute of Technology, Abbotabad, Pakistan, Models and Methods in Fluid Dynamics, 23-27 June 2003, `Potential Symmetries and the reduction of pdes'
20. COMSATS Institute of Technology, Abbotabad, Pakistan, Models and Methods in Fluid Dynamics, 23-27 June 2003, `Equivalent Lagrangians and the inverse problem'
21. University of the Witwatersrand, SAMS, November 2003, 'Equivalent Lagrangians, new ideas and extensions'
22. University of Stellenbosch, SANUM2004, April 2004, 'Symmetries, conservation laws and pdes'
23. Chinese University of Hong Kong, ICCM 2004, December 2004, `Invariants and reduction of des'
24. Institute of Mathematics, Kiev, Ukraine, Symmetry 2005, June 2005, `Symmetries, conservation laws and partial Lagrangians'
25. COMSATS IIT, Islamabad, July 2006, Modeling and Methods in Fluid Mechanics, July 2006, `Painleve properties and evolution type equations'
26. Beijing, 'Nonlinearity and Complexities', August 2006, 'Noether symmetries and Isometries'
27. QAU, Islamabad, September 2006 `Reduction methods in pdes'.
28. University of Cape Town, SAMS October 2007, `On approximate Lagrangians and invariants for scaling reductions of a nonlinear wave equation with damping'
29. University of Kwazulu Natal, SAMS November 2008, `?
30. NCBA&E, Lahore, January 2009, `On multipliers and conservation Laws'
31. University of Stellenbosch, SANUM2009, April 2009, `Symmetry invariance of conservation laws'
32. Durban University of Technology, May 2009, `Symmetries and Conservation Laws'
33. University of Johannesburg, SAMS November 2009
34. Sultan Qaboos University, Oman, January 2010, `The conservation laws of a class of nonlinear pdes'
35. University of Pretoria, SAMS November 2010
36. University of the Witwatersrand, Jan 2012, Symmetries conference (Galois Centenary) `Equivalent Lagrangians for pdes'
37. Yildiz Technical University, Istanbul, Turkey, June 2012, `Symmetries and Conservation Laws for Schrodinger type equations'
38. Abu Dhabhi University, Abu Dhabhi Dec 2012, `Symmetries/Conlaws and reduction of damped driven Schrodinger equations'.

39. University of Stellenbosch, SANUM, April 2013, `Symmetries and conservation laws of difference equations'.
40. XVII Int Conf on Waves and Stability in Continuous Media, Levico, Italy, June 2013, `Reduction of Schrodinger type equations using symmetries and conservation laws'.
41. PMNP, Gallipoli, Italy, June 2013, `Conservation laws of Difference Equations'.
42. ICMREA 2013, Ho Chi Minh City, Vietnam, December 2013, `Symmetries and conservation laws of classes of nonlinear pdes'.
43. SDEA II 2014, Islamabad, Pakistan (Invited), January 2014, `Symmetries and associated conservation laws for difference equations'
44. SDETT 2014, COMSTECH, Islamabad, January 2014, `Symmetries and conservation laws of some classes of nonlinear pdes'
45. Symmetry, Methods, Applications (G Bluman), Vancouver, May 2014, `Symmetry structures of ASD manifolds'
46. ADEANS, Saltrock, July 2015, `On the symmetries and conservation laws of manifolds'
47. SAMS, Wits University, Nov 2015, `Symmetries and manifolds'
48. Abu Dhabi International Conference, Dec 2015, `Symmetry and Conservation Laws of some asd manifolds'

Seminar talks delivered:

1. Mathematics Department – Wits University May 1991, `On Lie and Noether symmetries of second-order ordinary differential equations'
2. Pretoria University – Differential Equations seminars, August 1991, `Equivalent Lagrangians'
3. University of Cape Town – Applied Mathematics Department June 1992, `Equivalent Lagrangians and *sl(2,R)* and *sl(3,R)* solutions of some non-linear equations'
4. Centre for non-linear studies – Wits University March 1994, `Reduction of systems of second-order differential equations'
5. University of Cape Town – Math/Appled Math Dept September 1995, `Symmetries, conservation laws and the inverse problem'
6. University of the Northwest – Math Department September 1995, `The inverse problem in the calculus of variations'
7. University of Cape Town – Math/Applied Dept July 1998 ` Symmetries, conservation laws and differential forms for p.d.e.s'
8. University of the Witwatersrand – Centre of Differential Equations, Continuum Mechanics and Applications, May 1999, `The connection between symmetries and conservation laws'
9. University of the Witwatersrand – Centre of Differential Equations, Continuum Mechanics and Applications, September 1999, `Lagrangians for p.d.e.s.'

10. Quaid-i-Azam university, Islamabad, Pakistan, May 2000, ` The Lie group approach – an overview'
11. University of the Witwatersrand – Centre of Differential Eqautions, Continuum Mechanics and Applications, Workshop, May 2002, `Group theoretic methods for approximate invariants and Lagrangians'.
12. University of the Witwatersrand – Centre of Differential Eqautions, Continuum Mechanics and Applications, 2 August 2002,`Potential symmetries and conservation laws: ideas'
13. University of the Witwatersrand – Centre of Differential Eqautions, Continuum Mechanics and Applications, May 2003, `Equivalent Lagrangians – revisited'
14. University of the Witwatersrand – Centre of Differential Eqautions, Continuum Mechanics and Applications, May 2004, `About Invariants'
15. King Fahd University of Petroleum and Minerals – 5 December 2004, `Applications of Lie groups to differential equations'
16. King Fahd University of Petroleum and Minerals – 7 December 2004, `Symmetries and conservation laws – their uses'
17. Brock University (Canada) – 11 June 2006, `Painleve properties and variational problems'
18. Centre for Advanced Mathematics and Physics, NUST, Islamabad – 6 December 2006, `'
19. COMSATS Institute of Information Technology, Islamabad, December 2007, On approximate and partial Lagrangians.
20. King Fahd University of Petroleum and Minerals, Approximate Lagrangians versus partial Lagrangians, January 2008.
21. King Fahd University of Petroleum and Minerals, Multipliers and the construction of conservation laws, December 2008.
22. Universiti Teknologi, JB, Malaysia, On partial Lagrangians, June 2010.
23. Ibnu Sina Institute for fundamental science studies, Universiti Teknologi, JB, Malaysia, A complete analysis of the conservation laws of a family of nonlinear equations, June 2010.
24. King Fahd University of Petroleum and Minerals,`Symmetries and conservation laws of the wave equation on the Vaidya manifold' in the Analysis Day series, Dec 2010
25. King Fahd University of Petroleum and Minerals, `Symmetry structures on the Bianch III manifold', Dec 2012.
26. School of Maths, WITS, `Symmetries and conservation laws of equations', April 2013.
27. GIK Institute, Swabi, Pakistan, `Symmetries of Schrodinger equations', September 2013.
28. AIMS, Muizenberg, `Symmetries and conservation laws of classes of nonlinear pdes', November 2013
29. GIK Institute, Swabi, Pakistan, `Higher order symmetries of some wave equations', Jan 2014.
30. AIMS, Muizenberg, `Symmetry structures of ASD manifolds', April 2014

31. University of British Columbia, Vancouver, `Symmetry structures of manifolds I', October 2014
32. University of British Columbia, Vancouver, `Symmetry structures of manifolds II', October 2014
33. University of the Witwatersrand, Centre of Excellence, `On the symmetries and conservation laws of manifolds', September 2015
34. KFUPM, Dhahran, Saudi Arabia, `Symmetry and Conservation Laws of some asd manifolds', Dec 2015

Attendance at other international meetings:

1. Gent (Belgium): seventh workshop on differential geometric methods in mechanics -- 31 August-4 September 1992
2. Atlanta (Georgia, USA): fourteenth IMACS world congress -- 11 July-15 July 1994
3. Islamabad, Quaid-i-Azam University, April/May 2000
4. Vancouver, ICIAM 2011, July 2011
5. Zurich ETH, D-Days, A Panorama of Geometry, June 2013.

Collaborations, including proposed:

1. November/December 1998 -- Prof G Unal, Istanbul Technical University, Turkey
2. July/August 1999 -- Prof A Qadir, Quaid-i-Azam University, Islamabad, Pakistan
3. April/May 2000 -- Department of mathematics, Quaid-i-Azam University, Islamabad, Pakistan
4. June 2003 -- Dept of Maths, Northwest Univ, Xian, China
5. Continuing (began: December 2004) -- Profs Bokhari and Zaman, King Fahd University of Petroleum and Minerals, Saudi Arabia
6. Continuing –- Prof S Anco, Brock University, St Catherines, Canada
7. Continuing – Prof A Biswas, Delaware State University, USA
8. Continuing – Dr K Fakhar, Universiti Technologi Malaysia/UBC
9. Continuing –Prof G Bluman, University of British Columbia
10. Continuing – Prof R Sahadevan, Ramanujan Institute, Chenai, India
11. Continuing – Dr Eerdun Buhe, Inner Mongolia, China
12. Continuing – Dr Gangwei Wang

Membership of Editorial Boards:

1. Conference papers in Mathematics
2. Journal of Mathematics
3. Journal of Applied Mathematics

4. Applied Mathematics and Information Sciences

RESEARCH PUBLICATIONS

Papers in refereed journals:

1. Kara A H and Mahomed F M 1992, Equivalent Lagrangians and the solution of some classes of nonlinear equation, Int. J. Non-linear Mech. 27 919-927 doi:10.1016/0020-7462(92)90044-8
2. Kara A H and Mahomed F M 1993, A note on the solutions of the Emden-Fowler Equation, Int. J. Non-linear Mech. 28 379-384 doi:10.1016/0020-7462(93)90013-B
3. Mahomed F M, Kara A H and Leach P G L 1993, Lie and Noether counting theorems for one-dimensional systems, J. Math. Anal. Appl. 178 116-9 doi:10.1006/jmaa.1993.1295
4. Kara A H, Mahomed F M and Leach P G L 1994, The Noether equivalence problem for particle Lagrangians, J. Math. Anal. Appl., 188(3) 867-884 doi:10.1006/jmaa.1994.1468
5. Adam A A, Mahomed F M and Kara A H 1994 Canonical forms for particle Lagrangians, Quaestiones Mathematicae 17(4)} 469-478 DOI: 10.1080/16073606.1994.9631778
6. Kara A H, Mahomed F M and Adam A A 1994 Reduction of differential equations using Lie and Noether symmetries associated with first integrals, Lie Groups and Their Applications 1 being Proceedings of the International Conference: Modern Group Analysis, Theory and Applications in Mathematical Modelling 137-145
7. Adam A A, Mahomed F M and Kara A H 1994 New solutions of the Abel Equation, Lie Groups and Their Applications 1 being Proceedings of the International Conference: Modern Group Analysis, Theory and Applications in Mathematical Modelling 1-10
8. Kara A H, Mahomed F M and Vawda F E 1994 `Symmetries of first integrals and solutions of differential equations' Lie Groups and Their Applications 2 27-48
9. Kara A H and Mahomed F M 1995 `On the classification of first-order Lagrangians on the line' Int. J. Th. Phys. 34(11) 2209-2216 DOI: 10.1007/BF00673841
10. Kara A H, Mahomed F M and Unal G 1999 `Approximate symmetries and conservation laws with applications', Int Journal of Theoretical Physics 38(9) 2389-2400 DOI: 10.1023/A:1026684004127
11. Kara A H and Mahomed F M 2000 `The relationship between symmetries and conservation laws' Int Journal of Theoretical Physics 39(1) 23 DOI: 10.1023/A:1003686831523

12. Kara A H 2001 `On the conserved quantities and associated symmetries for some classes of wave equations with non-linearities' Int Journal of Non-linear Mechanics 36(1) 125 doi:10.1016/S0020-7462(99)00092-X
13. Kara A H and Khalique C M 2001 `Conservation laws and associated symmetries for some classes of soil water motion equations' Int Journal of Nonlinear Mechanics 36(7) 1041-1045 doi:10.1016/S0020-7462(00)00067-6
14. Kara A H, Mahomed F M and Changzheng Qu 2000 `Approximate potential symmetries for partial differential equations' J Physics A: Math and general 33(37) doi: 10.1088/0305-4470/33/37/312
15. Kara A H and Changzheng Qu 2000 `Nonlocal symmetries and associated conservation laws for wave equations with variable speed' Int Journal of Theoretical Physics 39(10) 2503-2512 DOI: 10.1023/A:1026445222247
16. Ibragimov N H, Kara A H and Mahomed F M 1998 `Lie-Backlund and Noether symmetries with applications' Nonlinear Dynamics 15(2) 115-136 DOI: 10.1023/A:1008240112483
17. Johnpillai A G and Kara A H 2001 `A variational formulation of approximate symmetries and conservation laws' International J of Theoretical Physics 40(8) 1501-1509 DOI: 10.1023/A:1017561629174
18. Feroze T and Kara A H 2002 `Group theoretic methods for approximate invariants and Lagrangians for some classes …' Int Journal of Nonlinear Mechanics 37(2), 275-280 doi:10.1016/S0020-7462(00)00111-6
19. Johnpillai A G and Kara A H 2002 `Nonclassical Potential Symmetries of Differential Equations' Nonlinear Dynamics 30 , 167-177 DOI: 10.1023/A:1020498600432
20. Kara A H and Mahomed F M 2002 `A basis of conservation laws for partial differential equations' Journal of Nonlinear Mathematical Physics 9, 60-72 doi:10.2991/jnmp.2002.9.s2.6
21. Hayat T, Kara A H and Momoniat E 2003 `Exact Flow of a third-grade fluid on a porous wall ' Int J Nonlinear Mechanics 38(10), 1533—1537 doi:10.1016/S0020-7462(02)00116-6
22. Kara A H 2003 `Potential Symmetry Generators of Some Perturbed Nonlinear Evolution Related Equations' Mathematical and Computational Applications 8(1), 89-94
23. Davison A H and Kara A H 2004 `Potential symmetry generators and associated conservation laws of perturbed nonlinear equations' Applied Mathematics and Computation 156(1), 271-285 doi:10.1016/j.amc.2003.07.012
24. Davison A H and Kara A H 2003 `Potential Symmetries and Associated Conservation Laws - a Generalization' Nonlinear Dynamics 36(4), 369-377 DOI: 10.1023/B:NODY.0000009927.83712.8a
25. Hayat T, Kara A H and Momoniat E 2005 `Unsteady flow of a Fourth Grade Fluid past a porous plate' Mathematical and Computer Modelling 41, 1347-1353 doi:10.1016/j.mcm.2004.01.010

26. Bokhari A, Kashif A R and Kara A H 2003 `Spherically symmetric static spacetimes and their classification by Ricci inheritence symmetries' Il Nuovo Cimento B 118(8) 803-818
27. Kara A H 2004 `Equivalent Lagrangians and the Inverse Variational Problem with Applications' Quaestiones Mathematicae 27(2) 207-216 DOI: 10.2989/16073600409486095
28. Hayat T and Kara A H 2006 `Coutte flow of a third grade fluid with variable magnetic field' Mathematical and Computer Modelling 43 132-137 doi: 10.1088/0305-4470/38/21/008
29. Kara A H and Khalique C M 2005 'Nonlinear evolution type equations and their exact solutions using inverse variational methods' J Physics A:38 4629-4636 doi: 10.1088/0305-4470/38/21/008
30. Bokhari A H, Kara A H and Zaman F D 2005 `Soliton and other exact solutions of the combined KdV-modified KdV and generalized KdV equations' Il Nuovo Cimento B 120 393-395
31. Kara A H and Mahomed F M 2006 `Noether-type symmetries and conservation laws via partial Lagrangians' Nonlinear Dynamics', 45(3-4), 367-383 DOI: 10.1007/s11071-005-9013-9
32. Bokhari A H, Kara A H, Kashif A R and Zaman F D 2006 `Noether Symmetries Versus Killing Vectors and Isometries of Spacetimes', Int J Th. Physics, 45(6) 1029-1039 DOI: 10.1007/s10773-006-9096-1
33. Bokhari A H, Kara A H and Zaman F D 2006 `A note on a symmetry analysis and exact solutions of a nonlinear fin equation' Applied Mathematics Letters, 19, 1356-1360 doi:10.1016/j.aml.2006.02.003
34. Bokhari A H, Kara A H and Zaman F D 2007 `Exact solutions of some general nonlinear wave equations in elasticity' Nonlinear Dynamics 48(1,2) 49-54 DOI: 10.1007/s11071-006-9050-z
35. Bokhari A H, Kara A H and Zaman F D 2006 `Invariant solutions of certain nonlinear evolution type equations with small parameters' Applied Mathematics and Computation 182(2) 1075-1082 doi:10.1016/j.amc.2006.05.006
36. Johnpillai A G, Kara A H and Mahomed F M 2006 'A Basis of Approximate Conservation Laws for Perturbed Partial Differential Equations' Int Journal of Nonlinear Mechanics, 41(6,7), 830-837 doi:10.1016/j.ijnonlinmec.2006.04.009
37. Hayat T and Kara A H 2006 `Analysis of non-Newtonian flow in a rotating system' Int J of Computational Fluid Dynamics, 20(3-4), 157-162 DOI: 10.1080/10618560600836080
38. Ahmad A, Bokhari A H, Zaman F D and Kara A H 2006 `Symmetry reductions for 2-dimensional wave equation' Il Nuovo Cimento B, 121(6), 571-578
39. Kara A H, Mahomed F M and Qadir A 2008 'APPROXIMATE SYMMETRIES AND STABILITY OF CONSERVATION LAWS OF THE GEODESIC EQUATIONS FOR THE SCHWARZSCHILD METRIC' Nonlinear Dynamics 51(1-2) 183-188 DOI: 10.1007/s11071-007-9201-x

40. Kara A H 2007 `Solitary wave solutions to some classes of nonlinear evolution type equations using inverse variational methods' Nonlinear Analysis Series A: Theory, Methods & Applications 67 3194–3198 doi:10.1016/j.na.2006.10.001
41. Asghar S, Hayat T and Kara A H 2007 'Exact solutions of thin film flows' Nonlinear Dynamics 50(1,2) 229-233 DOI: 10.1007/s11071-006-9153-6
42. Bokhari A H, Kara A H, Kashif A R and Zaman F D 2007 `On the symmetry structures of the Minkowski metric and a Weyl re-scaled metric' Int J Th Phys 46(11) 2795-2800 DOI: 10.1007/s10773-007-9390-6
43. Marwat Khan D, Kara A H and Mahomed F M 2007 `Symmetries, conservation laws and multipliers via partial Lagrangians and Noether's Theorem for classically non variational problems' Int J Th Phys 46(12) 3022-3029 DOI: 10.1007/s10773-007-9417-z
44. Kara A H, Fahomed F M Nadeem N and Wafo Soh C, 2007 ``Partial Noether operators and first integrals via partial Lagrangians' Mathematical Methods in the Applied Sciences, 30 2079-2089 DOI: 10.1002/mma.939
45. Asghar S, Mushtaq M and Kara A H 2008 'On some analytical solutions for mixed convection flow near a stagnation point on a vertical surface in a porous medium' Journal of porous Media, 11(4) 215 DOI: 10.1615/JPorMedia.v11.i4.70
46. Ahmad A, Bokhari A H, Zaman F D and Kara A H 2008 ` Symmetry classifications and reductions of some classes of (2+1)-nonlinear heat equation' JMAA 339 175-181 doi:10.1016/j.jmaa.2007.07.002
47. Bokhari A H,and Kara A H 2007 `Noether versus Killing Symmetry of conformally static Flat Friedmann metric' General Relativity and Gravitation 39 2053-2059 DOI: 10.1007/s10714-007-0501-8
48. Ferhana Ahmad, S Asghar and A H Kara 2008 `Travelling wave and similarity solutions to nonlinear evolution type equations through inverse variational and symmetry methods' Nonlinear Analysis A: 69 2223-2229 doi:10.1016/j.na.2007.08.002
49. Asghar S, Mushtaq M and Kara A H 2008 'Exact solutions using symmetry methods and conservation laws for the viscous flow through expanding-contracting channels' Appl Math Modelling 32 2936-2940 doi:10.1016/j.apm.2007.10.006
50. Johnpillai A G, Kara A H and Mahomed F M 2009 `Approximate Noether-type symmetries and conservation laws via partial Lagrangians for PDEs with a small parameter' J Comp and Appl Maths, 223, 508-518. doi:10.1016/j.cam.2008.01.020
51. Asghar S, Mahmood M and Kara A H 2009 'Solutions using symmetry methods and conservation laws for the viscous flow through a porous medium inside a deformable channel' Journal of Porous Media, 12(8) 811-819 DOI: 10.1615/JPorMedia.v12.i8.70
52. Hayat T, Kara A H and Momoniat E 2009 `Travelling Wave Solutions to Stokes' Problem for a Fourth Grade Fluid' Appl Math Modelling 33 1613-1619 doi:10.1016/j.apm.2008.02.014

53. Marwat D N Khan, Kara A H and Hayat T, 2008 `Conservation laws and associated Noether type vector fields via partial Lagrangians and Noether's theorem for the Liang equation' Int J Th Phys 47 3075-3081 DOI: 10.1007/s10773-008-9739-5
54. Davison A H and Kara A H 2008 `Symmetries and Differential Forms' Journal of Nonlinear Math Phys 15(1) 36-43 doi:10.2991/jnmp.2008.15.s1.3
55. Bokhari A H, Zaman F D and Kara A H 2008 `On the invariant solutions of the nonlinear wave and ϕ4-model' Journal of Nonlinear Math Phys., 15(1) 105-111 doi:10.2991/jnmp.2008.15.s1.9
56. Ferhana Ahmad, Kara A H, Bokhari A H and Zaman F D 2008 `Group theoretic methods for approximate Lagrangians and invariants for scaling reductions of a nonlinear wave equation with damping' Applied Mathematics and Computation, 206, 16-20. doi:10.1016/j.amc.2008.08.054
57. Bokhari A H, Kara A H and Zaman F D 2009 `On the exact solutions and conservation laws of the model for tumor growth in the brain' Journal of Math Aanalysis and Applications 350 256-261 doi:10.1016/j.jmaa.2008.09.065
58. Bokhari A H, Kara A H, Kareem M and Zaman F D 2009 `Invariance analysis and variational conservation laws of the wave on some `non flat' manifolds' IJTP 48 1919-1928 DOI: 10.1007/s10773-006-9096-1
59. Ahmad A, Bokhari A H, Zaman F D and Kara A H 2010 `A Complete Classification of Symmetries Of Nonlinear Wave Equation' Quaestiones Mathematicae 33, 75–94 DOI: 10.2989/16073601003718271
60. Johnpillai A G, Kara A H and Mahomed F M 2010, `Conservation laws of a nonlinear (1+1) wave equation' Nonlinear Analysis Series B: Real World Applications 11 2237-2242 doi:10.1016/j.nonrwa.2009.06.013
61. Johnpillai A G, Kara A H and Mahomed F M, `CONSERVATION LAWS OF SOME NON-VARIATIONAL PERTURBED PDES VIA A PARTIAL VARIATIONAL APPROACH' 2010 International Journal of Modern Physics B 24(22) 4253-4267 DOI: 10.1142/S0217979210056116
62. Kara A H, 2009 `A symmetry invariance analysis of the multipliers & conservation laws of the Jaulent-Miodek and some families of systems of KdV type equations' Journal of Nonlinear Math Phys. 16, 149-156 DOI: 10.1142/S1402925109000376
63. Narain R and Kara A H 2010, `An analysis of the conservation laws for certain third-grade fluids' Nonlinear Analysis B:, 11, 3236-3241 doi:10.1016/j.nonrwa.2009.11.018
64. Narain R and Kara A H 2010 `The Noether conservation laws of some Vaidiya Int J Th Phys. 49(20) 260-269 DOI: 10.1007/s10773-009-0199-3
65. Narain R and Kara A H 2010 `Conservation laws of high-order nonlinear p.d.e.s and the redefinition of all variational conservation laws in the class of p.d.e.s with mixed derivatives' J Phys A:: Math. Theor. 43, 085205 doi: 10.1088/1751-8113/43/8/085205

66. Bokhari A H, Al Dweik A, Zaman F D, Kara A H and Mahomed F M 2010, `Generalization of the double reduction theory' Nonlinear Analysis B 11 3763-3769 doi:10.1016/j.nonrwa.2010.02.006
67. Bokhari A H, Ahmed A Y, Kara A H and Zaman F D 2010 `A nonlinear (2+1)-heat equation with variable diffusivity' Nonlinear Dynamics 62 127-138 DOI: 10.1007/s11071-010-9704-8
68. Biswas A and Kara A H 2011 'CONSERVATION LAWS FOR REGULARIZED LONG WAVE EQUATION AND R(m,n) EQUATION' Advanced Science Letters, 4, 168-170.
69. AbdulWahab M, Bokhari A H, Kara A H, Zaman F D 2010 `On generalized nonlinear Burgers' Equation' J Partial Differential Equations 23(3) 281-289
70. Biswas A and A H Kara 2010 `1-SOLITON SOLUTION AND CONSERVATION LAWS OF THE GENERALIZED DULLIN-GOTTWALD-HOLM EQUATION' Appl Maths and Comp 217(2) 929-932 doi:10.1016/j.amc.2010.05.085
71. Biswas A and A H Kara 2010 `1-SOLITON SOLUTION AND CONSERVATION LAWS FOR THE JAULENT-MIDEK EQUATION WITH POWER LAW NONLINEARITY' Appl Maths and Comp 217(2) 944-948 doi:10.1016/j.amc.2010.06.021
72. Bokhari A H, Al Dweik A, Kara A H, Mahomed F M and Zaman F D 2011, `Double reduction of a general nonlinear (2 + 1) wave equation via conservation laws, Comm Nonlin Sc Num Sim 16 1244-1253 doi:10.1016/j.cnsns.2010.07.007
73. Morris R and Kara A H 2010 `New Conservation Laws of some third-order systems of pdes arising from higher order multipliers' Appl Maths and Comp 217 2639-2643 doi:10.1016/j.amc.2010.08.002
74. Narain R and Kara A H 2010 `On the redefinition of variational and `partial' variational conservation laws in a class of nonlinear p.d.e.s with mixed derivatives', Mathematical and computer Applications, 15(4), 732-741.
75. Kara A H 2010, `An analysis of the symmetries and conservation laws of the class of Zakharov-Kuznetsov equations' Mathematical and computer Applications, 15(4), 658-664.
76. Biswas A and A H Kara 2010 `1-SOLITON SOLUTION AND CONSERVATION LAWS FOR NONLINEAR WAVE EQUATION IN SEMICONDUCTORS' Appl Maths and Comp 217 4289–4292 doi:10.1016/j.amc.2010.09.054
77. Fakhar K and Kara A H 2011, `An analysis of the invariance and conservation laws of some classes of nonlinear Ostrovsky equations and related systems' Chinese Physics Letters Vol. 28, No. 1, 010201 DOI: 10.1088/0256-307X/28/1/010201
78. Fakhar K, Kara A H, Ali I and Sajid M 2011, `On solutions of an unsteady magnetohydrodynamics of a third grade fluid with Hall effects' Mathematics and Computers with Applications, 61, 98-987. DOI: 10.1016/j.camwa.2010.12.046

79. Jamal S and Kara A H 2012 ` New {higher-order} conservation laws of some classes of wave and Gordon-type equations' Nonlinear Dynamics 67 97–102 DOI: 10.1007/s11071-011-9961-1
80. Ebadi G, Kara A H, Petkovic M D and Biswas A 2011 `SOLITON SOLUTIONS AND CONSERVATION LAWS OF THE GILSON-PICKERING EQUATION' Waves in random and complex media, 21(2) 378-385 DOI: 10.1080/17455030.2011.569036
81. Bokhari A H and Kara A H 2011, `A complete analysis of the conservation laws of the family of nonlinear equations…' CNSNS, 16, 4183-4188 doi:10.1016/j.cnsns.2011.03.007
82. Bokhari A H, Ahmed al Dweik, Kara A H, M Kareem and F D Zaman 2011, `Wave equation on spherically symmetric Lorentzian metrics', Journal of Maths Phys, 52, 063511. doi:10.1063/1.3597232
83. AbdulWahab M, Bokhari A H, Kara A H, Zaman F D 2011, ` On the complete Lie point symmetry subalgebras and solutions of the inviscid Burgers' equation' PRAMANA J 77(3), 407-414 doi:10.1007/s12043-011-0160-x
84. Jamal S and Kara A H 2011, `Higher-order symmetries and conservation laws of multi-dimensional Gordon-type equations' Pramana J Phys, 77(3), 447-460 DOI: 10.1007/s12043-011-0165-5
85. Fakhar K, Zainal, Kara A H 2011, `A note on the interplay between symmetries, reduction and conservation laws of Stokes' first problem for third grade rotating fluids' Pramana J of Physics, 77(3), 439-445 DOI: 10.1007/s12043-011-0164-6
86. Narain R and Kara A H 2011, `Invariance analysis and conservation laws of the wave equation on Vaidya manifolds' Pramana J Phys, 77(3), 555-570 DOI: 10.1007/s12043-011-0175-3
87. Johnpillai A G, Kara AH and Biswas A 2011, `Symmetry solutions and reductions of a class of generalized (2+1)-dimensional Zakharov-Kuznetsov equation',International Journal of Nonlinear Sciences and Numerical Simulation, 12, 45-50
88. Bokhari A H, Fakhar K, Kara A H and Zaman F 2011, ` Invariance properties and conservation laws of the Kadomstev-Petviashvili equation with power law nonlinearity' Chinese Physics Letters, 28(9), 090204 DOI:10.1088/0256-307X/28/9/090202
89. Biswas A, Kara A H and E Zerrad, 2011, ` Dynamics and Conservation laws of generalized chiral solitons' The Open Nuclear and Partcle Physics Journal, 4, 21-24
90. Biswas A, Masemola P, Morris R and Kara A H 2012, `On the symmetries, reductions and conservation laws of the damped-driven nonlinear Schrodinger equation' Canadian J Phys, 90, 199-206 doi:10.1139/P2012-008
91. Biswas A, Ebadi G, Kara A H, Yildrim A and Petkovic M 2012 `SOLITON SOLUTIONS AND CONSERVATION LAWS OF THE ITO EQUATION', Proc. Romanian Acad. A, 13(3), 215-224

92. Fakhar K and Kara A H 2012, `On the reduction of Chazy classes and other third-order differential equations related to boundary layer flow models' Chinese Phys Letters, 29(6), 060202
93. Fakhar K, Masemola P and Kara A H, `On the reduction and analytical/exact solutions of the density dependent Nagumo and Fisher equations' J Engineering Mathematics, (2013) 82:77–83 DOI 10.1007/s10665-012-9591-8
94. Jamal S, Kara A H and Bokhari A H 2012 `Symmetries, conservation laws, reductions and exact solutions for the Klein-Gordon equation in de Sitter space-times' Canadian J of Physics, 90, 667-674 doi:10.1139/P2012-065
95. Masemola P, Kara A H and A Biswas 2013, `OPTICAL SOLITONS AND CONSERVATION LAWS FOR DRIVEN NONLINEAR SCHRODINGER'S EQUATION WITH LINEAR ATTENUATION', Optical and Laser Technology, 45, 402-405 http://dx.doi.org/10.1016/j.optlastec.2012.06.017
96. Morris M, Kara A H and A Biswas 2012, `Soliton Solutions, Conservation Laws and Reductions of certain classes of Generalized Hunter-Saxton type equations' Zeitschrift für Naturforschung A, 67a, 613 – 620 (2012) / DOI: 10.5560/ZNA.2012-0071
97. Wison N and Kara A H 2012, "Equivalent Lagrangians: Generalization, Transformation Maps, and Applications," Journal of Applied Mathematics, vol. 2012, Article ID 860482, 19 pages, 2012. doi:10.1155/2012/860482
98. Jamal S, Kara A H and R Narain, 2012 ` Wave equations in Bianchi space-times', J Appl Maths, vol 2012, Article ID 765361, doi:10.1155/2012/765361
99. Kara A H, Triki H and Biswas A 2013 , `Conservation laws of the Bretherton equation', Applied Mathematics and Information Systems 7(3) 877-879
100. Biswas A, Krishnan, Suarez P, Kara A H and Kumar 2013, `SOLITARY WAVES AND CONSERVATION LAWS OF BONA-CHEN EQUATIONS' Indian Journal of Physics, 87(2), 169–175 DOI 10.1007/s12648-012-0208-x
101. Johnpillai A G, Kara AH and Biswas A 2013 , `SYMMETRY REDUCTION, EXACT GROUP-INVARIANT SOLUTIONS AND CONSERVATION LAWS OF BENJAMIN-BONA-MAHONEY EQUATION' Applied Mathematics Letters, 26, 376-381
102. Bokhari A H, Zaman F D, Jamal S and Kara A H 2013, `The symmetries and conservation laws of some Gordon-type equations in Milne spacetime' PRAMANA J Phys, 80(5), 739-755 **DOI: 10.1007/s12043-013-0518-3**;
103. Morris R and Kara A H 2013, `Double reductions/exact solutions of the third-order Drinfeld-Sokolov-Wilson system of equations' AMC, 219, 6473–6483 http://dx.doi.org/10.1016/j.amc.2013.01.015
104. Bokhari A H, Zaman F, Narain R and Kara A H 2013, ` The symmetry structures and conservation laws of the Petrov III metric and the wave equation on the curved manifold' Indian J Phys, 87(7), 717–722 DOI 10.1007/s12648-013-0283-7

105. Johnpillai A G, Kara AH and Biswas A 2013, `Exact Group Invariant Solutions and Conservation Laws of Complex Modified KdV' Zeitschrift für Naturforschung A, 68a, 510 – 514 DOI: 10.5560/ZNA.2013-0027
106. Biswas A, Kara A H, Savescu M, Bokhari A H and Zaman F 2013, `SOLITONS AND CONSERVATION LAWS IN NEUROSCIENCES ' Int J Biomathematics, 6(3), 1350017, DOI: 10.1142/S1793524513500174
107. Masemola P, Morris R, Kara A H and Biswas A 2013 `On symmetries, reductions, conservation laws and conserved quantities of optical solitons with inter-modal dispersion', Optik 5116– 5123 http://dx.doi.org/10.1016/j.ijleo.2013.03.072
108. Morris R, Kara A H and Biswas A 2013, `Soliton solutions and conservation laws of the Zakharov equation in plasmas with power law nonlinearity' Nonlinear Analysis: Modeling and Control, 18(2), 153-159
109. Bokhari A H, Zaman F, Biswas and Kara A H (2013) ` SOLITONS AND CONSERVATION LAWS OF KLEIN-GORDON EQUATION WITH POWER LAW AND LOG LAW NONLINEARITIES' Nonlinear Dynamics, 73, 2191-2196 DOI 10.1007/s11071-013-0933-5
110. Fakhar K, Kara A H, R Morris and Hayat T, 2013 `Similarity solutions and conservation laws for rotating flows of an Oldroyd-B fluid' Indian J Phys, 87(10), 1035–1040 DOI: 10.1007/s12648-013-0330-4
111. Johnpillai A G, Mahomed F M, Kara A H, Bokhari A H and Zaman F D 2013, `Classification of static spherically symmetric static spacetimes by Noether Symmetries' International J Theoretical Phys, 52, 3534–3542 DOI 10.1007/s10773-013-1656-6
112. Krishnan, Kumar, Kara A H and Biswas A, 2013 `TOPOLOGICAL SOLITONS, CNOIDAL WAVES AND CONSERVATION LAWS OF COUPLED WAVE EQUATIONS' Indian J Phys, 87(12) 1233–1241 DOI 10.1007/s12648-013-0356-7
113. Biswas A, Kara A H, Moraru L Bokhari A H and Zaman F. D. 2014 `CONSERVATION LAWS OF COUPLED KLEIN-GORDON EQUATIONS WITH CUBIC AND POWER LAW NONLINEARITIES', PROCEEDINGS OF THE ROMANIAN ACADEMY, Series A, 15, 123-159
114. Shabbir G, Kara A H and Qureishi M A, 2013 `Proper projective symmetry in Bianchi type I space-times', The European Physical Journal – Plus, 128: 130 DOI 10.1140/epjp/i2013-13130-1
115. Biswas A, Kara A H, Bokhari A H and Zaman F 2013, `SOLITONS AND CONSERVATION LAWS OF THE COMPLEX-VALUED KLEIN-GORDON EQUATIONS IN phi-4 FIELD THEORY' Indian Journal of Physics, 88(3), 311–315 DOI 10.1007/s12648-013-0415-0
116. Savescu M, Johnson S, Kara A H, Crutcher S H, Kohl R and Biswas A 2013, Conservation laws for optical solitons with spatio-temporal dispersion, Journal of Electromagnetic Waves and Application, 28(2) 242–252 http://dx.doi.org/10.1080/09205071.2013.863716

117. Ugur C, Jamal S and Kara A H 2014 ` Invariances and conservation laws based on some FRW universes' Int J Th Phys 53, 1483–1494 10.1007/s10773-013-1948-x
118. Biswas A, Song M, Triki, H, Kara A H, Ahmed B, Sttrong A and Hama A, 2014, `Solitons, Shock Waves, Conservation Laws and Bifurcation analysis of Boussinesq Equation with Power Law Nonlinearity and Dual Dispersion', Applied Mathematics & Information Sciences, , 8(3), 949-957
119. Houria Triki; S. Lepule, A. Love, Abdul Hamid Kara, Anjan Biswas (2014) , `Dark optical solitons and conservation laws for parabolic and dual-power law nonlinearities in (2+1)-dimensions', Optik, 125, 2784–2792 http://dx.doi.org/10.1016/j.ijleo.2013.11.053
120. Kara A H 2014, On the reduction and conservation laws of some dispersionless integrable systems, Acta Applicandae Mathematicae, 376, 132:371 DOI 10.1007/s10440-014-9909-9
121. Folly-Gbetoula M and Kara A H (2014) ` Symmetry and Transformation Properties of Iterative Ordinary Differential Equation' , J Maths Analysis and Applic, 415 135–147 http://dx.doi.org/10.1016/j.jmaa.2014.01.038
122. Ali S, Bokhari A H, Zaman F D and Kara A H (2014), `Invariance, conservation laws and exact solutions of the Nonlinear Cylindrical Fin Equation', Z. Naturforsch. 69a, 195 –198 / DOI: 10.5560/ZNA.2014-0008
123. Triki H, Biswas A and Kara A H (2014), ` DOMAIN WALLS TO BOUSSINESQ-TYPE EQUATIONS IN (2+1)-DIMENSIONS' Indian J Phys, 88(7):751–755 DOI 10.1007/s12648-014-0466-
124. Triki H, Biswas A, Bhrawi A H and Kara A H (2014), ` Soliton solution and conservation law of Gear-Grimshaw model for shallow water, Acta Physica Polonica A, 125, 1099-1106
125. B Z H Joseph, K Fakhar, S Ahmad and A H Kara, 2015, `Conservation of the cylindrical and elliptic cylindrical K-P equations' Applied Maths and Information Sciences, 9, No. 2, 631-635 http://dx.doi.org/10.12785/amis/090211
126. Folly-Gbetoula M, Ndlovu L, Kara A H and A Love (2014), `Conservation laws and multipliers of certain difference equations', Abstract and Applied Analysis, Volume 2014, Article ID 490165, 6 pages, http://dx.doi.org/10.1155/2014/490165R
127. Morris, A H Kara and A Biswas, (2016) ` An analysis of the Zhiber-Shabat equation including Lie point symmetries and conservation laws' Collectanea Mathematica, 67:55–62 DOI 10.1007/s13348-014-0121-z
128. Folly-Gbetoula M and Kara A H `Symmetries, associated conservation laws and `integrability' of difference equations (2014)', Advances in Difference Equations, 2014:224, DOI: 10.1186/1687-1847-2014-224

129. Masemola P and Kara A H (2014), `On PT symmetry systems: invariance, conservation laws and reductions', Journal of Appl Maths, Volume 2014 Article ID 849361, 7 pages, http://dx.doi.org/10.1155/2014/849361
130. Rozborova A, Biswas A and Kara A H, 2015, `ADDITIONAL CONSERVATION LAWS FOR ROSENAU-KdV-RLW EQUATION WITH POWER LAW NONLINEARITY BY LIE SYMMETRY', Nonlinear Dynamics, 79, 743–748 DOI 10.1007/s11071-014-1700-y
131. Jamal S, Kara A H, G Shabbir and Narain R, 2015, `Symmetry structures of the Bianchi type I, V, and IX cosmological models' Indian J Phys., 89(4), 411–416 DOI 10.1007/s12648-014-0625-0
132. Gangwei Wang, Kara A H, Eerdunbuhe, Fakhar K, 2015, `Group analysis and conservation laws of a coupled system of partial differential equations describing the carbon nanotubes conveying fluid' Romanian J Phys., 60(7-8), 952-960
133. A. H. Kara, Polina Razborova & Anjan Biswas, 2015, `SOLITONS AND CONSERVATION LAWS OF COUPLED OSTROVSKY EQUATION FOR INTERNAL WAVES ' Applied Maths and Computation, 258, 95-99 DOI: 10.1016/j.amc.2015.01.093
134. Gangwei Wang and Kara A H, 2015 `Conservation laws, multipliers, adjoint equations and Lagrangians for Jaulent-Miodek and some families of systems of KdV type equations', Nonlinear Dynamics, 81:753–763 DOI 10.1007/s11071-015-2025-1
135. Gangwei Wang, Fakhar K and Kara A H, 2015, ` Soliton solutions and group analysis of a new coupled (2+1)-dimensional Burgers equations' ACTA PHYSICA POLONICA B, 26, 923-930
136. Jamal S and Kara A H, 2015, `A CLASSIFICATION OF ZERO GAUGE NOETHER SYMMETRIES FOR THE WAVE EQUATION ON CYLINDRICALLY SYMMETRIC STATIC MANIFOLDS' Romanian J Phys., 60, 1328-1336
137. Gangwei Wang, Kara A H and Fakhar K, 2015, ` Symmetry analysis and conservation laws for the class of time fractional nonlinear dispersive equation' Nonlinear Dynamics, 82, 281–287 DOI 10.1007/s11071-015-2156-4
138. Gangwei Wang and Kara A H, 2015, `Nonlocal symmetry analysis, explicit solutions and conservation laws for the fourth-order Burgers' equation' , Chaos, Solitons & Fractals, 81, 290–298
139. Gangwei Wang, K Fakhar and A H Kara, 2016, `Nonlocal symmetry analysis and conservation laws to an third-order Burgers equation' Nonlinear Dynamics, 83:2281–2292 DOI 10.1007/s11071-015-2480-8
140. T Collins, , A H KARA, ALI H. BHRAWY, HOURIA TRIKI, ANJAN BISWAS, `DYNAMICS OF SHALLOW WATER WAVES WITH LOGARITHMIC NONLINEARITY' , to appear Romanian Reports in Physics

141. Eeerdunbuhe, Bluman G and Kara A H, 2016, ` Conservation laws for some systems of nonlinear PDEs via the linearizing operator approach ' J Math Anal and Applic, 436, 94-103 http://dx.doi.org/10.1016/j.jmaa.2015.11.052
142. Basingwa J, Kara A H, Bokhari A H, Mousa R and Zaman F D, `Symmetry and conservation law structures of some anti-self-duality (ASD) manifolds' to appear Pramana J Phys.
143. P. MASEMOLA, A.H. KARA, A.H. BHRAWY, A. BISWAS, 2016 ` CONSERVATION LAWS FOR COUPLED WAVE EQUATIONS' Romanian J Phys, 61 (3-4), 367-377.
144. G. Shabbir, A Khan, M A Qureishi, A H Kara, 2016, `A note on classification of teleparallel conformal symmetries in non-static plane symmetric space-times in the teleparallel theory of gravitation using diagonal tetrads', International Journal of Geometric Methods in Modern Physics, 13(4), 1650046 (8 pages) DOI: 0.1142/S0219887816500468
145. Gangwei Wang; A.H. Kara; Kamran Fakhar; Jose Vega-Guzman; Anjan Biswas, `Group analysis, exact solutions and conservation laws of a generalized fifth order KdV equation' to appear Chaos, Solitons & Fractals
146. J J H Bashingwa, A H Kara, A H Bokhari, F D Zama, (2016) ` The geometry and invariance properties for certain classes of metrics with neutral signature ' International Journal of Geometric Methods in Modern Physics, 13, No. 6 1650080 DOI: 10.1142/S0219887816500808
147. Mohammad Mirzazadeh, Mehmet Ekici, Abdullah Sonomezoglu, Mostafa Eslami, Qin ZhouAbdul H Kara, Daniela MilovicFayequa B Majid, Anjan Biswas, Milivoj Belic, `OPTICAL SOLITONS WITH COMPLEX GINZBURG-LANDAU EQUATION', Nonlinear Dynamics, 85, 1979–2016 DOI 10.1007/s11071-016-2810-5
148. Folly-Gbetoula M and Kara A H, ` Invariance analysis and Reduction of Discrete Painleve Equations', 2016 ' Journal of Difference Equations and Applications, http://dx.doi.org/10.1080/10236198.2016.1198342

Papers in refereed proceedings of conferences

1. Mahomed F M, Kara A H and Leach P G L 1993 `Symmetries of Particle Lagrangians' in Proceedings of the International Workshop, Modern Group Analysis: Advanced Analytical and Computational Methods in Mathematical Physics (Catania, Italy) Ibragimov N H, Torrisi M and Valenti A edd (Dordrecht: Kluwer Academic Publishers) 273-276
2. Ibragimov N H, Kara A H and Mahomed F M 1996 `New identities connecting the Euler-Lagrange, Lie-Backlund and Noether operators' Modern Group Analysis VI, January 1996 281-288

3. Kara A H and Mahomed F M 1999 `Action of Lie-Backlund symmetries on conservation laws' Modern Group Analysis VII, Nordfjordeid, Norway, July 1997, 175-180
4. Kara A H and Khalique CM 2000 `Conservation laws and associated symmetries for a class of soil water motion equations' MOGRAN VIII, Ufa, Bashkortostan, October 2000
5. Kara A H 2003 `Potential symmetry generators of some perturbed wave equations', Proceedings of the Colloquium on Lie Theory, Universidad de Vigo, Spain, July 2000, 99-103
6. Johnpillai A G and Kara A H 2005 `Nonclassical potential symmetries and exact solutions of pdes' in Proceedings of MOGRAN X, Cyprus, October 2004, 114-119
7. Jamal S, Kara A H and Bokhari A H, 2011 `Symmetries, conservation laws and reduction of wave and Gordon-type equations on Riemannian Manifolds' in Proceedings of World Academy of Science, Engineering and Technology, Phuket, December 21-23 2011, 954-957
8. Folly-Gbetoula M and Kara A H, 2015 `Symmetry Lie algebras and properties of linear ordinary differential equations with maximal dimension' Symmetries, Differential Equations and Applications (SDEA-II) International Journal of Modern Physics: Conference Series, Vol. 38 (2015) 1560074 (16 pages) DOI: 10.1142/S2010194515600745
9.

Other papers in proceedings of conferences

1. Mahomed F M, Kara A H and Adam A A 1993 `Classification of Particle Lagrangians of the Linear Second-order Equation' Proceedings of the XI Russian Colloquium: Modern Group Analysis Ibragimov N H and Berkovich L M edd (Moscow: Moscow Institute of Technology Publishers) 125-133
2. Vawda F, Mahomed F M and Kara A H 1994 `Inverse Problems and Invariance in the Calculus of Variations: An Overview' Proceedings of the Workshop on Chaos and Dynamical Systems: Durban 1994 275-284
3. Kara A H and Mahomed F M 1998 `Symmetries, conservation laws and their applications' Joint ISAMM/FRD Interdisciplinary workshops on symmetry analysis and mathematical modelling, 8/10 December 1998 112-122
4. Kara A H and Mahomed F M 2000 `The relationship between symmetries and conservation laws' Proceedings of the 3rd Hanno Rund conference, Durban, 13-16 September 2000 51-70

Book Chapters

1. Fakhar K, Kara A H, `On Solutions of the Navier-Stokes Equations', in Navier-Stokes Equations: Properties, Description and Applications, Editor: R. Younsi, NOVA publishers, ISBN: 978-1-61324-590-3.

Papers submitted or to be submitted

1. Shabbir G and Kara A H, `On the projective, Noether & Lie symmetries and conservation laws of some special classes of FRW and static spherically symmetric space-times' to Comm in Th Phys
2. R Morris, A H Kara and A Biswas, `Solitons and other solutions to the Boussinesq equation with dual-dispersion by the aid of Lie symmetry' to CNSNS

3. Savescu, Kara A H, Krishnan, Kumar, Biswas, Belic, ` EMBEDDED SOLITONS AND CONSERVATION LAWS WITH $\chi^{(2)}$ AND $\chi^{(3)}$ NONLINEAR SUSCEPTIBILITIES', to Waves in Random and Complex Media
4. Kara A H, Biswas A and Belic M, `CONSERVATION LAWS FOR OPTICAL SOLITONS IN BIREFRINGENT FIBERS AND MAGNETO-OPTIC WAVEGUIDES `, to Journal of Electromagnetic Waves and Applications
5. Usamah S. Al-Ali, Bokhari*, Zaman* and Kara, `Invariance properties and conservation laws of the nonlinear damped wave equation with power law nonlinearities' to Comm in Theoretical Phys
6. Al-Omari**, Bokhari*, Zaman* and Kara, ` Lie symmetries and conservation laws of the beam equation in Timoshenko model' to Journal of Mathematical Physics
7. Wang G and Kara A H, `Group analysis, fractional exact solution and conservation laws of the time fractional generalized Burgers equation', to J Math Phys.
8. Usamah S. Al-Ali,, Bokhari A H, Kara A H and Zaman F D, `Classification of Invariances and Conservation Laws of some Nonlinear Forced and Damped Wave Equations' to Waves in Random and Complex Media
9. Folly-Gbetoula M and Kara A H, `The Invariance and Conservation Laws of fourth-order Difference Equations' to Advances and Applications in Discrete Mathematics.
10. Bashingwa JJ and Kara A H, `Symmetry structures of wave equations on manifolds of neutral signatures', Results in Phys
11. Usamah S. Al-Ali, Ashfaque H. Bokhari, A. H., Kara and F. D. Zaman, `Classification of Invariances and Conservation Laws of (2+1) Nonlinear Damped Wave Equations', to ?
12. Wang G, Fakhar K and Kara A H, ` Symmetry reductions and conservation laws of the Short Pulse Equation', to Optik

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