Hossam Abdel-Aziz

Curriculum Vitae

Personal Data

Full Name	**Hossam El-Deen Seif Allh Abdel-Aziz Mohamed**
Nationality	Egyptian
Address	Mathematics Department, Faculty of Science, Sohag University, Sohag, Egypt
Date of Birth	21/11/1961
Email	habdelaziz2005@yahoo.com
major specialization	**Prue mathematics**
Current position	**Emeritus Professor**
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Research Interest

Classical Differential Geometry, Line Geometry and Computational Geometry , Non-Euclidean Geometry and its applications , Bezier and B-spline curves and surfaces , Rational curves and surfaces , Industrial curve and surface applications , Minkowski Space-Time Geometry , Galilean and pseudo-Galilean Geometry

Work Experience

2019 to date	Prof. Dr. Math. Department, Faculty of Science, Sohag University, Egypt.
2011 - 2016	Assistant Prof.Math. Department, Faculty of Science, Sohag University, Egypt.
2009 - 2010	Lecturer Math. Department, Faculty of Science, Sohag University, Egypt.
2003 - 2009	o Assistant Lecturer Math. Department, Faculty of Science, South Valley University, Egypt.
2000 - 2003	Demonstrator Math. Department, Faculty of Science, South Valley University, Egypt.

Education

2010 **Ph.D. in Mathematics "Differential Geometry", Faculty of Science.**, sohag, *Egypt*

1989 **M. Sc. Mathematics " Differential Geometry", Faculty of Science** , *South Valley University*, *Egypt*

1983 **Bachelor's Degree Faculty of Science** , *South Valley University* , *Egypt*

Languages

Arabic Native

English Very Good

Computer Skills

Expert MS.Office

Publications

1. H. S. Abdel-Aziz, Hebatallah M. Serry, Fifi M. El-Adawy and Amal A. Khalil, On admissible curves and their evolution equations in pseudo-Galilean space , J. Math. Computer Sci., 25 (2022), 370 -380.
2. H.S. Abdel-Aziz , E.A. Zanaty , Haytham A. Ali and M. Khalifa Saad Generating B´ezier curves for medical image reconstruction, Results in physics , 23 (2021) 103996 1-16.
3. H. S. Abdel-Aziz and A . H. Sorour, ON THE CURVATURE FUNCTIONS OF TUBE-LIKE SURFACES IN THE GALILEAN SPACE, Commun . Korean Math . Soc. 36 (2021), No.3, pp. 609 -622.
4. H. S. Abdel-Aziz, M. Khalifa Saad and A. A. Abdel-Salam, On involute-evolute curve couple in the hyperbolic and de Sitter spaces, Journal of the Egyptian Mathematical Society, (2019) 27:25, 1-18.
5. H. S. Abdel-Aziz, M. Khalifa Saad, and Haytham .A. Ali, Inextensible flows of curves in three-dimensional light cone, International Journal of Mathematics and Computation, Vol. 30; Issue No.1; (2019), 1-9.
6. H. S. Abdel-Aziz and M. Khalifa Saad, On Special Curves According to Darboux frame in the Three Dimensional Lorentz Space, CMC- Computers, Materials & Continua, 54(3) (2018), 229-249.
7. H. S. Abdel-Aziz, M. Khalifa Saad and A. A. Abdel-Salam, Some Geometric Invariants of Pseudo-Spherical Evolutes in the Hyperbolic 3-Space, CMC- Computers, Materials & Continua, (Accepted August 4, 2018).
8. H. S. Abdel-Aziz, M. Khalifa Saad and Haytham. A. Ali, Some properties of Special Magnetic Curves, International Journal of Analysis and Applications, 16(2) (2018), 193–208.
9. H. S. Abdel-Aziz and Adel. H. Sorour, On the Laplace operator of a tube surface in Euclidean space, Acta Universitatis Apulensis, 48(2018), 13–26.
10. H. S. Abdel-Aziz and M. Khalifa Saad, Computation of Smarandache curves according to Darboux frame in Minkowski 3-space, Journal of the Egyptian Mathematical Society, 25(4) (2017), 382-390.
11. H. S. Abdel-Aziz, Spinor Frenet and Darboux Equations of Spacelike Curves in Pseudo-Galilean geometry, Communications in Algebra, 45(10)(2017), 4321-4328.
12. H. S. Abdel-Aziz, A study of tube like surfaces according to type 2 Bishop frame in Euclidean space, Studia Universitatis Babes-Bolyai mathematica (Studia UBB Math), 62(2), (2017), 249-259.
13. A. T. Ali, H. S. Abdel-Aziz and A. H. Sorour, On some geometric properties of Quadric surfaces in Euclidean space, Honam Mathematical J, 38(3) (2016), 593-611.
14. H. S. Abdel-Aziz and M. Khalifa Saad, Classification of Bertrand and AW(k)-type curves according to the equiform geometry of pseudo-Galilean 3-space, Far East Journal of Mathematical Sciences

(FJMS), (Accepted 2016).

15. A. T. Ali, H. S. Abdel-Aziz and A. H. Sorour, On curvatures and points of the translation surfaces in Euclidean 3-Space, Journal of the Egyptian Mathematical Society, 23(1) (2015), 167-172.
16. Nassar H. Abdel-All, H. S. Abdel-Aziz, M. A. Abdel-Razek and A. A. Khalil, Evolution of surfaces patched by principal patch, Journal Wulfenia, 22(1) (2015), 395-406.
17. H. S. Abdel-Aziz, Spinor Equiform Frenet Equations for Curves in Euclidean 3-space, Tensor, N.S. 76(1) (2015), 47-55.
18. H. S. Abdel-Aziz and M. Khalifa Saad, Smarandache curves of some special curves in the Galilean 3-space, Honam Mathematical J, 37(2) (2015), 253-264.
19. H. S. Abdel-Aziz, and M. Khalifa Saad, Darboux frames of Bertrand curves in the Galilean and pseudo-Galilean spaces, JP Journal of Geometry and Topology, 16(1) (2014), 17–43.
20. H. S. Abdel-Aziz, M. Khalifa Saad and A. A. Abdel-Salam, On implicit surfaces and their intersection curve in Euclidean4- space, Houston Journal of Mathematics, 40(2) (2014), 339 -352.
21. H. S. Abdel-Aziz, Curves inelastic flows given with equiform geometry in Euclidean 4-space, Tensor, 75(2) (2014)), 121-131.
22. Nassar H. Abdel-All, H. S. Abdel-Aziz, M. A. Abdel-Razek and A. A. Khalil, Evolution of a space curve by observing its frame, Sci. Int. (Lahore), 26(3) (2014), 965-969.
23. H. S. Abdel-Aziz, Geometry of ruled surfaces of first type in Galilean and pseudo-Galilean spaces, Tensor, 75(2) (2014), 107-120.
24. Nassar H. Abdel-All, H. S. Abdel-Aziz, M. A. Abdel-Razek and A. A. Khalil, Evolution of a helix curve by observing its velocity, Life Science Journal 11(5s) (2014), 41-47.
25. Nassar H. Abdel-All, H. S. Abdel-Aziz, M. A. Abdel-Razek and A. A. Khalil, Evolution of a space curve by observing its frame, Sci. Int. (Lahore), 26(3) (2014), 965-969.
26. H. S. Abdel-Aziz, M. Khalifa Saad and A. A. Abdel-Salam, Tangential intersection curve of two ruled surfaces in E3 , Int. Journal of Mathematics and Statistics, 14(2) (2013), 55-65.
27. A. T. Ali, H. S. Abdel-Aziz and A. H. Sorour, Ruled surfaces generated by some special curves in Euclidean 3-Space, Journal of the Egyptian Mathematical Society, 21(3) (2013), 285-294.
28. H. S. Abdel-Aziz and M. Khalifa Saad, Null Bertrand curves on surfaces and their Darboux frames in Minkowski space-time, Int. Journal of Mathematics and Statistics, 11(1) (2012), 81-90.
29. H. S. Abdel-Aziz, M. Khalifa Saad and Sezai Kiziltug, Parallel surfaces of Weingarten type in Minkowski 3-space, International Mathematical Forum, 7(46) (2012), 2293 – 2302.
30. Nassar H. Abdel-All, H. S. Abdel-Aziz, M. A. Abdel-Razek, A. A. Khalil, Geometry of evolving plane curves problem via Lie Group analysis, Studies in Mathematical Sciences, 2(1) (2011), 51-62.
31. H. S. Abdel-Aziz and M. Khalifa Saad, Weingarten Timelike Tube Surfaces around a Spacelike Curve in Minkowski Space-Time, Int. Journal of Math. Analysis, Vol. 5, 2011, no.25, 1225 - 1236.
32. H. S. Abdel-Aziz, Darboux rotation axis of a Frenet motion for spherical indicatrices in Euclidean 3-space, Tensor, N.S., Vol.72, No.2, (2010), 158-165.
33. M.F. EL-Sabbagh and H. S. Abdel-Aziz, Moving time-like curves and soliton equations in Minkowski 4-space, Tensor, N. S., Vol.71, No.3, (2009), 163-171.
34. H. S. Abdel-Aziz, On space-like curves and their curvatures in Minkowski 4-space, Tensor, N. S., Vol.70, No.3, (2008), 287-293.
35. H. S. Abdel-Aziz, New Special Surfaces in de Sitter 3-Space, Applied Mathematics & Information Sciences, 2 (3), (2008), 345-352.
36. H. S. Abdel-Aziz, Symmetry of partial differential equations and their conservation laws using differential forms, Tensor, N.S., Vol.68, No.3, (2007), 248-257.
37. H. S. Abdel-Aziz, On the geometry of nonclassical symmetries of a new class of nonlinear PDE's through compatibility, Int. J. of Modern Math, Vol.13, No.2, (2007), 123-135.
38. H. S. Abdel-Aziz, Soliton equations and their geometric solutions, IL Nuovo Cimento B, Vol. 121, B, N. 6, (2006), 629-635.

39. H. S. Abdel-Aziz, Geometric phase of a coupled system, Communications in Theoretical Physics, 42 (5), (2004), 672.
40. M.F. EL-Sabbagh and H. S. Abdel-Aziz, Pseudospherical planes and evolution equations in higher dimensions I, Bull Fac. Sci. Assiut Univ, Vol. 22(1-C), (1993), 61-87.
41. M.F. EL-Sabbagh and H. S. Abdel-Aziz, Pseudospherical planes and evolution equations in higher dimensions II, Bull Fac. Sci. Assiut Univ, Vol. 22(1-C), (1993), 89-106.

Conferences

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2. M. Khalifa Saad, G. Weiss, H. S. Abdel-Aziz, M. Solliman. An attempt to define null Bertrand curves in a pseudo-Euclidean space. Proc. 1st Internat. Workshop on Line Geometry and Kinematics, Paphos / Cyprus 2011.
3. H. S. Abdel-Aziz and M. Khalifa Saad, Space-like Bézier curves in four-dimensional Minkowski space. 2nd International Conference on Mathematics and Information Security (ICMIS), Sep. 10-13, Sohag, Egypt, 2011.
4. M. Khalifa Saad, H.S. AbdelAziz, Gunter Weiss and M. Solliman. On Space-like Bézier Curves in Minkowski Space-time and its applications in computer aided geometric design. Accepted in 15th Internat. Conf. On Geometry and Graphics Montréal / Canada 2012.
5. H. S. Abdel-Aziz, M. Khalifa Saad and D. M. Farghal, Spherical indicatrices of special curves in the Galilean space G3. Dig. Proc. Internat. Conf. On Mathematics, Trends and Development (ICMTD12), Cairo/ Egypt, 2012.
6. H. S. Abdel-Aziz, M. Khalifa Saad and S. A. Mohamed, Dual spherical curves of Bishop frame in Dual space D3. International Conference on New Horizons in Basic and Applied Science, Hurghada, Egypt, 2013.
7. H. S. Abdel-Aziz, M. Khalifa Saad and D. M. Farghal, On Smarandache curves in the Galilean and pseudo-Galilean Spaces. 3rd International Conference on Mathematics and Information Security (ICMIS), Dec. 28-30, Luxor, Egypt, 2013.