

# Curriculum Vitae

**Name:** El HASSAN EL KINANI

**Nationality:** Moroccan

## **Address:**

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## **Degrees:**

- Ph.D, Mathematical Physics Université Mohamed V 1999, Rabat, Morocco.
- Doctorat, Mathematical Physics Université Mohamed V 1995, Rabat, Morocco.

## **Current Position:**

- Professor, , Department of Mathematics, National School of Arts and Crafts, Moulay Ismail University, Meknès, Morocco

## **Honouris, Awards, Membership of Professional Societies**

- Associate director research at National School of Arts and Crafts, Moulay Ismail University 2014-2018.
- Member associate (junior) at ICTP 2001-2008.
- Member of the moroccan academy of the young researchers.
- Head of mathematical department Faculty Sciences and Technology 2001-2003 and 2003-2005.

- I regularly referee for more than 10 journals (Physics Letters A, Elsevier. Report on Mathematical Physics, the Institute of Physics, Nicolaus Copernicus University et Pergamon, Elsevier Science Ltd., Oxford, International Journal of Pure and Computational Mathematics, African Journal of Mathematics Physics, the Moroccan grouping on High Energy Physics (GNPHE), International Journal of open problems in computer science and mathematics, International center of scientific research and studies (ICSRS), Advances in dynamical Systems and Applications (ADSA), Science Journal of Mathematics and statistics, International Journal of Information and Network Security, International Journal of Biomathematics).

**Participation at the International Congress and foreign research institute visits during the last ten years:**

- Participation at International Congress of Mathematicians, ICM 2018 1-9, August, Rio Janeiro, *Brésil* 2018.
- Participation at Symposium on Clifford Algebras, Mathematical Physics and Related Topics, July 30, 2018, Federal University of ABC, São Paulo, *Brésil*.
- Participation at the 2<sup>nd</sup> International Conference on Computational Mathematics and Engineering-Sciences-(CMES2017), 20-22 may 2017, *Istanbul, Turkey*.
- Participation at the International Conference on Differential Geometry, Algebra and Analysis, November 15-17, 2016, *Jamia Millia Islami, New Delhi, India*.
- Participation at the International Conference on Algebra and its Applications ICAA-16 November 12-14, 2016 *Aligarh Muslim University, Aligarh-India*.
- Participation at the 3<sup>rd</sup> International Conference on Recent Advances in Pure and Applied Mathematics 19-23 may 2014, *Bodrum-Mugla, Turkey*.
- Participation at the conference: Symmetries, Differential Equations and Applications (SDEA – II) 27<sup>th</sup> Jan – 30<sup>th</sup> Jan 2014, *Islamabad Pakistan*.
- Participation at the Indian Bio-Mathematical Meeting, 14-16 March 2013. *Indian Statistical Institute, Kolkata, India*.

- Participation at the 5th Podlasie Conference on Mathematics, 25-28 June 2012. Bialystok University of Technology, Poland.
- Visiting the mathematical department university of Aveiro Portugal 26 June 17 July 2011, as invite professor under the (NECTAR)(FCT), Portugal (CNRST), Morocco
- Visiting the mathematical department university of Aveiro Portugal 12-20 November 2010, as invite professor under the (NECTAR)(FCT), Portugal (CNRST), Morocco
- Visiting the mathematical section ICTP 10 June-12 August 2010 short terms visite.

### Research Interests:

- My main research interests is the Lie symmetries approach to classical and fractional partial differential equations. In fact, one of the most powerful methods available to analyze nonlinear partial differential equations is the method of Lie groups. An important feature of these method is that one derive special solutions associated with nonlinear partial differential equations straightforwardly which are otherwise inaccessible through other methods.
- I'm also interested by the classical and quantum cryptography, quantum information
- The Lie algebras, their representation, their extensions and their deformations and their applications in mathematical physics.

### Publications :

I have published over 80 research papers (Publications : **80** ; **RG Score** : **25.04**; **reads** : **5000** ; **citations** : **244**)

See ( [https://www.researchgate.net/profile/El\\_Kinani\\_El\\_Hassan](https://www.researchgate.net/profile/El_Kinani_El_Hassan))

The most recent of which are given below :

1. *“Lie symmetry analysis and conservation laws for the time fractional Black-Scholes equation”*. International Journal of Geometric Methods in Modern Physics, 2019. doi : <https://doi.org/10.1142/S0219887820500103>.

2. *"On the discrete symmetry analysis of some classical and fractional differential equations"* Mathematical Methods in the Applied Sciences, 2019. doi : <https://doi.org/10.1002/mma.6064>.
3. *"Lie symmetry analysis of conformable differential equations"* AIMS Mathematics, 2019, 4(4): 1133-1144. doi : <https://doi.org/10.3934/math.2019.4.1133>.
4. *"Variational calculus involving nonlocal fractional derivative with Mittag-Leffler kernel"* Chaos Solitons Fractals, 2019, 118 : 117-121. doi : <https://doi.org/10.1016/j.chaos.2018.11.017>.
5. *"Exact solution of a nonlinear time-Caputo Fabrizio fractional dispersive equation"* General Letters in Mathematics, 2018, 4(2), 67-75. doi : <https://doi.org/10.31559/glm2016.4.2.3>.
6. *"On the  $(\alpha, \beta)$ -Scott-Blair anti-Zener arrangement"*. Afrika Matematika, 2019. doi: <https://doi.org/10.1007/s13370-019-00752-6>.
7. *"On the stability of proliferation of kartinocytes in psoriatic skin fractional model"* Mathematical Methods in the Applied Sciences, 2019. doi : <https://doi.org/10.1002/mma.6023>.
8. *"On the solution of fractional order SIS epidemic model"* Chaos Solitons Fractals, 2018, 117 : 168-174. doi : <https://doi.org/10.1016/j.chaos.2018.10.023>.
9. *"Invariant Subspace Method and Some Exact Solutions of Time Fractional Modified Kuramoto-Sivashinsky Equation"*, British Journal of Mathematics & Computer Science 154(2016):pp. 1-10.
10. *"Lie symmetry analysis of sometime fractional partial differential equations"*, International Journal of Modern Physics: Conference Series Vol. 38 (2015) 1560075.
11. *"Exact solutions of time fractional Kolmogorov equation by using Lie symmetry analysis"* Journal of Fractional Calculus and Applications Vol. 5(1), pp. (2014),pp. 97-106