Curriculum vitae

AL MAGNIFICO RETTORE
DELL'UNIVERSITA' DEGLI STUDI DI MILANO **COD. ID: 6413**

Il sottoscritto chiede di essere ammesso a partecipare alla selezione pubblica, per titoli ed esami, per il conferimento di un assegno di ricerca presso il Dipartimento di Federigo Enriques Department of Mathematics

Responsabile scientifico: Prof. Scacchi

CURRICULUM VITAE

INFORMAZIONI PERSONALI

Cognome	
Nome	

OCCUPAZIONE ATTUALE

Incarico	**Struttura**
Associate professor	
Visiting Professor	

ISTRUZIONE E FORMAZIONE

Titolo	**Corso di studi**	**Università**	**anno conseguimento titolo**
Laurea Magistrale o equivalente	M. Sc	Minia University	June 2013
Specializzazione	Applied Mathematics		
Dottorato Di Ricerca	Ph.D in Computational and Applied Mathematics	School of Mathematics and Statistics, Central China Normal University, Wuhan, China	Dec. 2017
Master	M.Sc in Applied Mathematics,	Faculty of Science, Minia University, Al- Minia, Egypt.	June. 2013
Bachelor degree	BSc, applied mathematics	Faculty of Science, Minia University, Minya, Egypt.	2006 – 2009

ISCRIZIONE AD ORDINI PROFESSIONALI

Data iscrizione	**Ordine**	**Città**
7/2/2024	CAS President's International Fellowship Initiative	Shenzhen Institutes of Advanced

	Visiting Professor https://pifi.cas.cn/front/pc.html#/bicsite/home	Technology, Shenzhen, China https://www.siat.ac.cn/
Feb. 2023 – To date	Associate professor	Department of Mathematical Engineering, Faculty of Electronic Engineering, Menoufia University, Egypt https://www.menofia.edu.eg/Home/en
Jan. 2020 – Dec. 2022	CAS President's International Fellowship Initiative **Postdoctoral** fellow https://pifi.cas.cn/front/pc.html#/bicsite/home	Shenzhen Institutes of Advanced Technology, Shenzhen, China https://www.siat.ac.cn/
2018 – 2021	Postdoctoral fellow	Harbin institute of Technology, School of Mechanical Engineering, Shenzhen, China, http://en.hitsz.edu.cn/
Feb. 2018 – Feb. 2023	Assistant Professor	Physics and Mathematical Engineering Department, Faculty of Electronic Engineering, Menoufia University, Egypt, https://www.menofia.edu.eg/Home/en
2014 – 2017	Assistant Lecturer	Physics and Mathematical Engineering Department, Faculty of Electronic Engineering, Menoufia University, Egypt https://www.menofia.edu.eg/Home/en
2013 – 2014	Assistant lecturer	Department of Mathematics, Faculty of Science, Minia University, Al-Minia, Egypt, https://www.minia.edu.eg/Minia/
2010 – 2013	Demonstrator	Department of Mathematics, Faculty of Science, Minia University, Al-Minia, Egypt, https://www.minia.edu.eg/Minia/

LINGUE STRANIERE CONOSCIUTE

lingue	livello di conoscenza
Arabic	Native
English	Very good

PREMI, RICONOSCIMENTI E BORSE DI STUDIO

anno	Descrizione premio
Jan. 2024 – Oct. 2024	Visiting Professor, Laboratory for Engineering and Scientific Computing, Shenzhen Institutes of Advanced Technology, Chinese Academy of Science, Shenzhen 518055, China.
Jan. 2020 – Dec. 2022	CAS President's International Fellowship Initiative Postdoctoral fellow at Shenzhen Institutes of Advanced Technology, Shenzhen, China, https://www.siat.ac.cn/
Nov. 2021 – Nov. 2023	Principal Investigator of a collaboration International project Funded by 1.2 million E.L. from the Science & Technology Development Fund and the Ministry of Science and Technology of the People Republic of China (STDF Egypt- China) Call 2, under the title: “ High Performance Computing Algorithms and Software Development for Hemodynamics Analysis of Human Blood Flow” https://stdf.eg/ & https://en.most.gov.cn/
2022	Receiving the Menoufia University Certificate of Scientific Excellence
Oct. 2021	Completion fellowship certificate of postdoctoral at Harbin Institute of Technology (HIT) Shenzhen.
Dec. 2018	Outstanding Academic Achievement Award Menoufya University, Egypt.
Dec. 2017	Winner of ZHOU HONGYU Scholarship award 2017, CCNU, Wuhan, China.
Aug. 2016 – Aug. 2017	Visiting PhD student, Shenzhen Institutes of Advanced Technology, Chinese Academy of Science, Shenzhen 518055, China.
Jun. 2016	Outstanding Academic Achievement Award 2016, CCNU, China.
Jun. 2015	Outstanding Academic Achievement Award 2015, CCNU, China.
Aug. 2014 – Aug. 2017	PhD scholarship (full time) from Chinese Scholarship.
Jun. 2009	Outstanding Academic Achievement Award Minia University, Egypt.

ATTIVITÀ DI FORMAZIONE O DI RICERCA

descrizione dell’attività

Programs and training:

I have completed the following programs from the Faculty and Leadership Development Center (FLDC), Menoufya University, Egypt. Each progrm is 15th hours.

- Lifelong learning.

- Online assessments.
- Critical thinking skills.
- Crisis and disaster management.
- Learning outcomes and program/course description.
- Advanced global database usage.
- Decision making and problem solving.
- Ethics of scientific research.
- People management.
- Time and meeting management.

ATTIVITÀ PROGETTUALE

Anno	**Progetto**
Nov. 2021 – Nov. 2023	**Principal Investigator** of a collaboration International project Funded by 1.2 million E.L. from the Science & Technology Development Fund and the Ministry of Science and Technology of the People Republic of China 1.6 million RMB (STDF Egypt- China) Call 2, under the title: " High Performance Computing Algorithms and Software Development for Hemodynamics Analysis of Human Blood Flow" https://stdf.eg/ & https://en.most.gov.cn/

TITOLARITÀ DI BREVETTI

Brevetto	N/A

CONGRESSI, CONVEGNI E SEMINARI

Data	**Titolo**	**Sede**
May 25th - 29th 2015	International Conference on Numerical Partial Differential Equations and Their Applications, , Wuhan University, Wuhan.	China
21-22 Oct. 2021	International Exchange and Innovation Conference on Engineering & Science (IEICES), , Kyushu University.	Japan
June 18th - 20th, 2016	The 4th CAM-ICCM Workshop: Multiscale and Large-scale Scientific Computing	Hong Kong
June 21st - 23rd, 2017	Workshop on Optimization in Scientific Computing, CUHK	Hong Kong

26-27 Nov. 2020	The 3rd International Conference for Mathematics and Its Applications (ICMA20) Cairo	Egypt
3-4 July 2021	The 2nd IEEE International Conference on Electronic Engineering, Menoufia University, Egypt. Faculty of Electronic Engineering, Menouf.	Egypt
7-8 Oct. 2023	The 3nd IEEE International Conference on Electronic Engineering, Menoufia University, Egypt. Faculty of Electronic Engineering, Menouf.	Egypt

PUBBLICAZIONI

Libri
Abdelhamid, T., Rahma, A.G. (2024). The Ability of the CFD Approach to Investigate the Fluid and Wall Hemodynamics of Cerebral Stenosis and Aneurysm. Anter, A.M., Elhoseny, M., Thakare, A.D. (eds) Nature-Inspired Methods for Smart Healthcare Systems and Medical Data. Springer, Cham. https://doi.org/10.1007/978-3-031-45952-8_12
Talaat Abdelhamid and Mahmoud H. Farag, Numerical study for constrained optimal control problems of parabolic systems, Numerical Methods and Applications, Lab Lambert Academic publishing, Feb 2015. (Book). https://www.walmart.com/ip/Numerical-Study-for-Optimal-Control-Problems-of-Parabolic-Systems-9783848430482/793815739

Articoli su riviste
Talaat Abdelhamid, Ahmed G. Rahma, Md. Mahbub Alam, Md. Islam, Rongliang Chen, Qiang Zhou, Hongjun Zhu, Heat transfer and flow around curved corner cylinder: Effect of attack angle. SN Appl. Sci. 5, 163 (2023). https://doi.org/10.1007/s42452-023-05377-w
Ahmed G. Rahma, Talaat Abdelhamid, Numerical simulation of steady and pulsating flow over an isothermal cylinder with varying corner radius, Menoufia Journal of Electronic Engineering, (2023).
Ahmed G. Rahma, Khaled Yousef, Talaat Abdelhamid, Blood flow CFD simulation on a cerebral artery of a stroke patient. SN Appl. Sci. 4, 261 (2022). https://doi.org/10.1007/s42452-022-05149-y
Rahma, A.G., **Talaat Abdelhamid**. Hemodynamic and fluid flow analysis of a cerebral aneurysm: a CFD simulation. SN Appl. Sci. **5**, 62 (2023). https://doi.org/10.1007/s42452-023-05276-0
Talaat Abdelhamid, Ammar H. Elsheikh, Olatunji Mumini Omisore, N. A. Saeed, T. Muthuramalingam, Ronglinag Chen, Md. Mahbub Alam, Reconstruction of the heat transfer coefficients and heat fluxes in heat conduction problems, Mathematics and Computers in Simulation, Vol. 187, 2021, P 134-154.
Bassem Meknani, Jun Zhang & Talaat Abdelhamid, Pseudo-almost periodic C0 solutions to the evolution equations with nonlocal initial conditions, Applicable Analysis, 2021, https://doi.org/10.1080/00036811.2021.1969368 (ISSN: 0003-6811, IF: 1.278, Q2).
Ehsanul Azim, Md. Jahid Hasan Sagor, ShadmanSakief Hridoy, A.B.M.Rafiqul Hasan, S.M. Ashrafur Rahman, Abdul Alim, Talaat Abdelhamid, Effect of speed ratio and location of rotating cylinders on the heat transfer advancement, J. Heat Transfer. Feb 2022, 144(2), 022601. https://doi.org/10.1115/1.4053214

Talaat Abdelhamid, F. Khayat, H. Zayeni, and Rongliang Chen, Levenberg-Marquardt Method for identifying Young's modulus of the elasticity imaging inverse problem, Electronic Research Archive (ERA), 30, 4: 1532-1557, 2022. https://doi.org/10.3934/era.2022079
Zineb Laouar, Nouria Arar, and Abdelhamid Talaat, Efficient spectral Legendre Galerkin approach for the advection diffusion equation with constant and variable coefficients under mixed Robin boundary conditions, 2023, 7(1), 133 – 147. https://doi.org/10.31197/atnaa.1139533
Talaat Abdelhamid, Md. Mahbub Alam, and Md. Islam, Heat transfer and flow around cylinder: effect of corner radius and Reynolds number, International Journal of Heat and Mass Transfer, 171, 121105, 2021.
Talaat Abdelhamid, Rongliang Chen, Md. Mahbub Alam, Nonlinear conjugate gradient method for identifying Young's modulus of the elasticity imaging inverse problem, Inverse Problems in Science & Engineering, 1-21, 2021. https://doi.org/10.1080/17415977.2021.1905638
N. A. Saeed, Emad Mahrous Awwad, Talaat Abdelhamid, Mohammed A. El-Meligy and Mohamed Sharaf, Adaptive versus Conventional Positive Position Feedback Controller to Suppress a Nonlinear System Vibrations, Symmetry 2021, 13(2), 255. https://doi.org/10.3390/sym13020255
Md. Mahbub Alam, Talaat Abdelhamid, Ahmad Sohankar, Effect of cylinder corner radius and attack angle on heat transfer and flow topology, International Journal of Mechanical Sciences, 175 (2020) 105566.
Talaat Abdelhamid, Simultaneous identification of the spatio-temporal dependent heat transfer coefficient and spatially dependent heat flux using a MCGM in a parabolic system, Journal of Computational and Applied Mathematics, 32, 164 -176, 2017. https://doi.org/10.1016/j.cam.2017.06.031
Daijun Jiang and Talaat Abdelhamid, Simultaneous identification of Robin coefficient and heat flux in an elliptic system, International Journal of Computer Mathematics, 94 (1), 1-12, 2017.
Talaat Abdelhamid, Xiaomao Deng, and Rongliang Chen, A new method for simultaneously reconstructing the space-time dependent Robin coefficient and heat flux in a parabolic system, International Journal of Numerical Analysis and Modeling, 14 (6), pp 893–915, 2017. https://doi.org/10.1016/j.cam.2017.06.031
Ammar H. Elsheikh, Swellam W. Sharshir, A. S. Ismail, Ravishankar Sathyamurthy, Talaat Abdelhamid, Elbager M. A. Edreis, A. E. Kabeel & Zhang Haiou, An artificial neural network based approach for prediction the thermal conductivity of nanofluids, SN Applied Sciences, 2, 235 (2020). https://doi.org/10.1007/s42452-019-1610-1
Ammar H. Elsheikh, Swellam W. Sharshir, Mohamed Kamal Ahmed Ali, J. Shaib, Elbager M. A. Edreis, Talaat Abdelhamid, Chun Du, Zhang Haiou. Thin film technology for solar steam generation: A new dawn, Solar Energy, 177 (2019) 561–575. https://doi.org/10.1016/j.solener.2018.11.058
Talaat Abdelhamid, A.H. Elsheikh, Ahmed Elazab, S.W. Sharshir, and Ehab S. Selima, Daijun Jiang, Simultaneous reconstruction of the time-dependent Robin coefficient and heat flux in heat conduction problems, Inverse Problems in Science and Engineering, 26(9), 1231-1248, 2017. https://doi.org/10.1080/17415977.2017.1391243
Swellam W. Sharshir, Guilong Peng, A.H. Elsheikh, Elbager M.A. Edreis, Mohamed A. Eltawil, Talaat Abdelhamid, A.E. Kabeel, Jianfeng Zang, Nuo Yang, Energy and exergy analysis of solar stills with micro/nano particles: A comparative study, Energy Conversion and Management 177 (2018) 363–375. https://doi.org/10.1016/j.enconman.2018.09.074
Talaat Abdelhamid and Olatunji Mumini Omisore, An efficient method for simultaneously reconstructing Robin coefficient and heat flux in an elliptic equation using a MCGM, WSEAS Transactions on Heat and Mass Transfer, Vol. 12, 122-135, 2017.
Ehab S. Selima, Y. Mao, X. Yao, Adel M. Morad, Talaat Abdelhamid, B. Selim, Applicable symbolic computations on dynamics of small-amplitude long waves and Davey–Stewartson equations in finite water depth, Applied Mathematical Modelling 57, 2018. https://doi.org/10.1016/j.apm.2018.01.017
Talaat Abdelhamid, Meknani Bassem, Asmaa A. Amer, Ahmed Nagah, Optimal Control for Systems Described by Semi-linear Parabolic Equations, WSEAS Transactions on Mathematics, Vol.17, 58-64, 2018.
Olatunji Mumini Omisore , Shipeng Han, Lingxue Ren, Ahamed Elazab, Talaat Abdelhamid, Hui Li, Nureni

Ayofe Azeez, and Lei Wang, "Deeply-Learnt Damped Least-Squares Method for Inverse Kinematics of Snake-Like Robots", Neural Networks, Elsevier, 107 (2018): 34-47, 2018.

https://doi.org/10.1016/j.neunet.2018.06.018

Ahmed Elazab, Hongmin Ba, Yousry M. Abdulazeem, Talaat Abdelhamid, Sijie Zhou, Kelvin K. L. Wong, and Qingmao Hu, Post-Surgery Glioma Growth Modeling from Magnetic Resonance Images for Patients with Treatment, Scientific Reports, 7, 1222, 2017. https://www.nature.com/articles/s41598-017-01189-2

M. H. Farag and Talaat Abdelhamid, A combined exterior penalty function conjugate gradient algorithm for a class of constrained optimal control quasilinear parabolic systems, Information Theories and Applications, 20(2), 122-130, 2013.

M. H. Farag, Talaat Abdelhamid, and E. M. Kamal, Existence and uniqueness solution of a class of quasilinear parabolic boundary control problems, CUBO A Mathematical Journal, 15(2), 111–119, June 2013.

M. H. Farag, Talaat Abdelhamid, E. M. Kamal, Well-posedness of a quasilinear parabolic optimal control problem, International Journal of Pure and Applied Mathematics 76 (2), 157-166, 2012. https://ijpam.eu/contents/2012-76-2/1/1.pdf

Atti di convegni

Ahmed A. Mageed, Samah Abdel Aziz, Ayman EL-SAYED, **Talaat Abdelhamid**, A Comparative Study for Skin Cancer Optimization Based on Deep Learning Techniques, (2023) 3rd International Conference on Electronic Engineering (ICEEM).

Talaat Abdelhamid, Karim AbouMeshrafa, Ahmed G. Rahma, Design and Experiment of an Open-Source Syringe Pump for Blood Flow Applications, (2023) 3rd International Conference on Electronic Engineering (ICEEM).

Ahmed G. Rahma and **Talaat Abdelhamid**,Assessing the Effects of Stenosis and Aneurysms on Hemodynamic Parameters: A Numerical Investigation, (2023) 3rd International Conference on Electronic Engineering (ICEEM).

Talaat Abdelhamid, mohamed Sayed, Tasneem Sobhy, Review Study on Inverse Problems Using Deep Learning Techniques with applications, (2023) 3rd International Conference on Electronic Engineering (ICEEM).

Aziz, Samah Abdel, Hawbani, Ammar, Wang, Xingfu, Talaat Abdelhamid, Maolood, Ismail Y., Alsamhi, Saeed, Ismail, A. S., Improving Brain MRI Image Segmentation Quality: A Hybrid Technique for Intensity Inhomogeneity Correction, 34th Conference of Open Innovations Association (FRUCT), 2023, 20-26.

S Hridoy, E Azim, MJH Sagor, Talaat Abdelhamid, Investigating variation of dynamic frictional Effect of different textile fabrics against dry and wet human skin condition at a fixed load, International Exchange and Innovation Conference on Engineering & Science (IEICES), 2021-10-21 to 2021-10-22, Kyushu University, Japan.

Talaat Abdelhamid, Rongliang Chen and Mahbub Alam Md., Prediction of multi-parameters in the inverse heat conduction problems, IOP Publishing Ltd, Journal of Physics: Conference Series, Vol. 1707, 2020, International Conference on Physics, Mechanics and Mathematical Science 18-19 Oct.

2020, Xi'an, China. http://dx.doi.org/10.1088/1742-6596/1707/1/012003

Talaat Abdelhamid, Ahmed G. Rahma, R Chen, Flow structure around a curved corner cylinder with varied attack angles, 2nd IEEE, ICEEM Conference, 2021. https://doi.org/10.1109/ICEEM52022.2021.9480633

Iman Mohamad Sharaf and **Talaat Abdelhamid**, A similarity measure for interval type-2 fuzzy sets applied to fuzzy risk analysis, 2nd IEEE, ICEEM Conference, 2021. https://doi.org/10.1109/ICEEM52022.2021.9480660

Talaat Abdelhamid, R Chen, M Alam, A Numerical solution of the linear elasticity problem using the FEM, 2nd IEEE, ICEEM Conference, 2021. http://dx.doi.org/10.1109/ICEEM52022.2021.9480613

Talaat Abdelhamid and Md. Mahbub Alam, Vortex shedding and heat transfer dependence on low Reynolds numbers, the 1st International Symposium on Recent Advances in Vortex-Induced Vibrations Tianjin, China.

ALTRE INFORMAZIONI

A REFEREE IN DIFFERENT INTERNATIONAL JOURNALS

- Inverse problems

  http://iopscience.iop.org/journal/0266-5611

- Inverse Problems in Science and Engineering
  http://www.tandfonline.com/toc/gipe20/current

- International Journal of Computer Mathematics

  http://www.tandfonline.com/toc/gcom20/current

- Mathematics and Computers in Simulation

https://www.sciencedirect.com/journal/mathematics-and-computers-in-simulation

- International Journal of Heat and Mass Transfer

https://www.sciencedirect.com/journal/international-journal-of-heat-and-mass-transfer

- Physics of fluids

https://aip.scitation.org/journal/phf

- And other reputable International Journals in the area of my research.

Supervision of Postgraduate Students:

• Ahmed M. Abdelmagid, An artificial intelligence-based SCD algorithms development for Skin Cancer Detection, 2022, Mathematics Department.

• Ahmed G. Rahma, Blood flow CFD simulation on a cerebral artery of a stroke patient, 2021, Mathematics Department.

• Tasneem Mohamed, Deep Learning-Based Modeling for Image Reconstruction in Inverse Problems, 2023, Mathematics Department.

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Il presente curriculum, non contiene dati sensibili e dati giudiziari di cui all'art. 4, comma 1, lettere d) ed e) del D.Lgs. 30.6.2003 n. 196.

RICORDIAMO che **i curricula SARANNO RESI PUBBLICI sul sito di Ateneo** e pertanto si prega di non inserire dati sensibili e personali. Il presente modello è già precostruito per soddisfare la necessità di pubblicazione senza dati sensibili.

Si prega pertanto di **NON FIRMARE** il presente modello.

Luogo e data: