

Curriculum Vitae

José Fernando Ferreira Mendes



Department of Physics, University of Aveiro, Portugal

Google Scholar: [JFFMendes](#)

ORCID: <http://orcid.org/0000-0002-4707-5945>

Email: jfmendes@ua.pt

Personal webpage: <http://sweet.ua.pt/jfmendes/>

Education Habilitation in Physics, University of Porto (UP), Portugal (2002); PhD in Physics, UP, Portugal (1995); Master's in Physics, UP, Portugal (1990).

Current and previous positions Full Professor, Department of Physics, UA (2005 – ...); Associate Professor, Department of Physics, University of Aveiro, Portugal (2002 - 2005), Assistant Professor, Department of Physics, University of Porto, Portugal (1995 – 2002), Maître de Conférence, Physics Department, University Henri Poincaré, France (1998, 2004), Invited Professor, Computer Science Department, Univ. Fed. Minas Gerais, Brazil (2000); Invited Professor at École Polytechnique Fédérale de Lausanne (EPFL, 2018), Invited Professor at Nanyang Technical University (NTU, 2018), Invited Researcher ETH (Risk Center, 2019); Postdoctoral Fellow, Boston University, MA, USA (1995 - 1996); Assistant, Department of Physics, University of Porto, Portugal (1987 – 1995); Visiting researcher, Physics Department, Oxford University (1993 – 1994); Visiting researcher, Geneva University (1992).

Institutional Responsibilities (selected) *Vice-Rector* for Research, University of Aveiro (2010 - 2018); *Director* (elected) of Physics Department, UA (2004 – 2010), *Director* of the Associated Laboratory I3N – Institute of Nanostructures, Nanomodelling and Nanofabrication (2009 - 2010; 2023 – ...); Appointed to the *Board of Directors*, Institute of Oil & Gas (ISPG – Galp Energia) (2013 -2016); Elected *Vice-President/Treasurer* of the European Consortium of Innovative Universities (ECIU) (2017 – 2018); Member of the *Council Board* (nominated by the Minister for Science and Technology) of the Iberian Nanotechnology Laboratory, INL (2013 -2019); *Director* of PCJICAM (China-Portugal consortium) in representation of the Portuguese universities; Scientific leader and Coordinator of the Group of Complex Systems and Random Networks (2002 – ...); *President* (elected) of the Complex Systems Society (2021-2024).

Prizes, Distinctions, and Awards Fundação Calouste Gulbenkian (*Prémio Ciência*, 2004); *Fellow* (elected) of the Academia Europaea (2012), *Senior Prize* of the Complex Systems Society (2020), *Fellow* of the American Physical Society (APS, 2020); *Fellow* of the Network Science Society (2019), *Prémio Investigação* “Litoral Awards” (2019), Prize *Mérito Académico* (2005), Prize “*Teaching Hero*” (elected by students) (2019).

Supervision of Graduate Students and Postdoctoral Fellows 10 PhD Thesis supervised, and 16 post-doctoral fellows mentored. Several of my PhD students have received national and international prizes and awards for their research work in my team.

Commissions of Trust (selected, membership) ERC Starting and Synergy Grants Reviewer; IBM Prize Committee (2010 -); Editorial Board of Scientific Reports, Editorial Board of Complexity, Editorial Board of Journal of Complex Networks, Editorial Board ISRN Combinatorics, Editorial Board of Chaos, Solitons & Fractals, Editorial Board of Entropy, Editorial Board of Discover

Materials; Editor-in-Chief of Complexity section of Entropy; Member of the American Physical Society (APS); Member of the European Physical Society (EPS), Member of the Portuguese Physical Society.

Publications (summary) More than 165 papers in refereed journals, including 1 Reviews of Modern Physics (IF = 54.4), 1 Advances in Physics (IF = 30.92), 1 Nature Physics (IF = 20.11), 2 Physical Review X (IF=15.76), 13 Physical Review Letters (IF = 9.16), 70 Physical Review E/B (IF = 2.53/4.04);

3 Books published in Oxford University Press (1st edition 2003, 2nd edition 2013, more than 4200 citations; the second one published in June 2022), and one book in Cambridge University Press, 2021.
4 Books Proceedings of Conferences (2005, 2019, 2022, 2023)

Citations More than 25000 (Google Scholar); h-index 54.

Ten most cited:

- Evolution of networks: From biological nets to the Internet and WWW, SN Dorogovtsev, JFF Mendes, Oxford University Press, (2003) - 4200 citations
- Evolution of networks, SN Dorogovtsev, JFF Mendes, Advances in physics 51 (4), 1079-1187, (2002) - 4200 citations
- Critical phenomena in complex networks, SN Dorogovtsev, AV Goltsev, JFF Mendes, Reviews of Modern Physics 80 (4), 1275, (2008) - 2600 citations
- Structure of growing networks with preferential linking, SN Dorogovtsev, JFF Mendes, AN Samukhin, Physical review letters 85 (21), 4633, (2000) - 1811 citations
- Pseudofractal scale-free web, SN Dorogovtsev, AV Goltsev, JFF Mendes, Physical review E 65 (6), 066122, (2002) - 752 citations
- Evolution of networks with aging of sites, SN Dorogovtsev, JFF Mendes, Physical Review E 62 (2), 1842, (2000) - 638 citations
- k-Core Organization of Complex Networks, SN Dorogovtsev, AV Goltsev, JFF Mendes, Physical review letters 96 (4), 040601, (2006) - 764 citations
- Language as an evolving word web, SN Dorogovtsev, JFF Mendes, Proceedings of the Royal Society of London. Series B: Biological Sciences, (2001) - 468 citations
- Ising model on networks with an arbitrary distribution of connections, SN Dorogovtsev, AV Goltsev, JFF Mendes, Physical Review E 66 (1), 016104, (2002) - 367 citations
- Networks as a novel tool for studying team ball sports as complex social systems, P Passos, K Davids, D Araújo, N Paz, J Miguéns, J Mendes, Journal of Science and Medicine in Sport 14, 170-176 - 355 citations.

Books:

- Evolution of Networks: From Biological Nets to the Internet and WWW, Oxford University Press, 1st edition 2003; 2nd edition, 2013. [Link](#)
- Weak Multiplex Percolation, Cambridge University Press, 2021. [Link](#)
- The Nature of Complex Networks, Oxford University Press, 2022. [Link](#)
- Science of Complex Networks: From Biology to the Internet and WWW, American Institute of Physics; 2005th edition (2005)
- Complex networks and their applications. Volume 1 e 2 Proceedings of the Eighth International Conference on Complex Networks and Their Applications COMPLEX NETWORKS 2019
- Network Science, 7th International Winter Conference, NetSci-X 2022, Porto, Portugal, February 8–11, 2022
- Complex Networks XIV: Proceedings of the 14th Conference on Complex Networks, CompleNet 2023.

A handwritten signature in blue ink, appearing to be 'H. M.', with a large, sweeping initial 'H' and a smaller 'M'.

Aveiro, July, 2025