

John A. Adam (mathematician)

John Anthony Adam is a British-American applied mathematician known for his work on patterns in nature and on mathematical modeling of the growth patterns of cancer and blood vessels. He is University Professor of Mathematics at Old Dominion University in Virginia.^{[1][2]}

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Education and career

Adam is a 1971 graduate, with first-class honours, from Queen Elizabeth College. He completed his Ph.D. in 1974 at University College London.^{[1][2]} His dissertation, *A Theoretical Study of Magnetohydrodynamic Processes in Solar Active Regions*, was jointly supervised by astrochemist Gillian Peach and astrophysicist Carole Jordan.^[3]

After working as a researcher in theoretical astronomy and applied mathematics, respectively at the University of Sussex and University of St Andrews, he became a lecturer in mathematics at the New University of Ulster in 1978, while also taking a research affiliation at the Dublin Institute for Advanced Studies. In 1983 he came to the US as a Fulbright scholar at the University of Rochester, and in 1984 he moved to Old Dominion University. He was named University Professor there in 1999.^{[1][2]}

Book

Adam is the author of books including:

- *A Survey of Models for Tumor-Immune System Dynamics* (edited with Nicola Bellomo, Springer, 1997)^[4]
- *Mathematics in Nature: Modeling Patterns in the Natural World* (Princeton University Press, 2003)^[5]
- *Guesstimation: Solving the World's Problems on the Back of a Cocktail Napkin* (with Lawrence Weinstein, Princeton University Press, 2008)^[6]
- *A Mathematical Nature Walk* (Princeton University Press, 2009)^[7]
- *X and the City: Modeling Aspects of Urban Life* (Princeton University Press, 2012)^[8]
- *Rays, Waves, and Scattering: Topics in Classical Mathematical Physics* (Princeton University Press, 2017)^[9]

Recognition

In 2012, Adam won the Carl B. Allendoerfer Award of the Mathematical Association of America for an exposition of blood vessel modeling.^[10]

References

1. "John Adam" (<https://www.odu.edu/directory/people/j/jadam>), *Directory*, Old Dominion University, retrieved 2021-12-08
2. *Brief Resume* (<https://ww2.odu.edu/~jadam/resume.html>), Old Dominion University, retrieved 2021-12-08
3. John A. Adam (<https://mathgenealogy.org/id.php?id=36895>) at the Mathematics Genealogy Project
4. Reviews of *A Survey of Models for Tumor-Immune System Dynamics*:
 - Mark Little, *Statistics in Medicine*, doi:10.1002/1097-0258(20001130)19:22<3140::AID-SIM610>3.0.CO;2-Q (<https://doi.org/10.1002%2F1097-0258%2820001130%2919%3A22%3C3140%3A%3AAID-SIM610%3E3.0.CO%3B2-Q>)
 - J. A. Sherratt, *Bulletin of Mathematical Biology*, doi:10.1007/BF02460004 (<https://doi.org/10.1007%2FBF02460004>)
5. Reviews of *Mathematics in Nature*:
 - Cristina Escoda, *Plus Magazine*, [1] (<https://plus.maths.org/issue31/reviews/book2/2pdf/index.html/op.pdf>)
 - Thomas Garrity, *The Mathematical Intelligencer*, doi:10.1007/BF02985798 (<https://doi.org/10.1007%2FBF02985798>)
 - Natali Hritonenko, MR2017708 (<https://mathscinet.ams.org/mathscinet-getitem?mr=2017708>)
 - Steve Morics, *MAA Reviews*, [2] (<https://www.maa.org/press/maa-reviews/mathematics-in-nature-modeling-patterns-in-the-natural-world>)
 - Anthony C. Robin, *The Mathematical Gazette*, JSTOR 3621271 (<https://www.jstor.org/stable/3621271>)
 - Yuri V. Rogovchenko, Zbl 1041.00008 (<https://zbmath.org/?format=complete&q=an:1041.00008>), Zbl 1102.00004 (<https://zbmath.org/?format=complete&q=an:1102.00004>)
 - Brian D. Sleeman, *Notices of the AMS*, [3] (<https://www.ams.org/journals/notices/200506/rev-sleeman.pdf>)
 - Dave Trautman, *The Mathematics Teacher*, JSTOR 27971735 (<https://www.jstor.org/stable/27971735>)
 - Will Wilson, *American Scientist*, JSTOR 27858462 (<https://www.jstor.org/stable/27858462>)
6. Reviews of *Guesstimation*:
 - Gary H. Bernstein, *IEEE Control Systems Magazine*, doi:10.1109/MCS.2008.931717 (<https://doi.org/10.1109%2FMCS.2008.931717>)
 - Ray Bert, *Civil Engineering Magazine*, [4] (<https://cedb.asce.org/CEDBsearch/record.jsp?dockey=0168051>)
 - Arthur Eisenkraft, *American Journal of Physics*, Bibcode:2008AmJPh..76..887E (<https://ui.adsabs.harvard.edu/abs/2008AmJPh..76..887E/abstract>), doi:10.1119/1.2955790 (<https://doi.org/10.1119%2F1.2955790>)

- Anna Faherty, *Plus Magazine*, [5] (<https://plus.maths.org/issue49/reviews/book1/2pdf/index.html/op.pdf>)
- John L. Hubisz, "How many ...? How much ...?", *The Physics Teacher*, doi:10.1119/1.2981305 (<https://doi.org/10.1119%2F1.2981305>)
- Harvey S. Leff, *Physics Today*, doi:10.1063/1.3086106 (<https://doi.org/10.1063%2F1.3086106>)
- Stephan Mertens, "On the Back of an Envelope", *Science*, doi:10.1126/science.1161440 (<https://doi.org/10.1126%2Fscience.1161440>), JSTOR 20144682 (<https://www.jstor.org/stable/20144682>)
- Vicente Muñoz, *EMS Reviews*, [6] (<https://euro-math-soc.eu/review/x-and-city-modeling-aspects-urban-life>)
- Diane Resek, *The Mathematics Teacher*, JSTOR 20876458 (<https://www.jstor.org/stable/20876458>)
- Christian Robert, *Chance*, doi:10.1080/09332480.2013.794625 (<https://doi.org/10.1080%2F09332480.2013.794625>)
- Andrew Ross, *MAA Reviews*, [7] (<https://www.maa.org/press/maa-reviews/guesstimation-solving-the-worlds-problems-on-the-back-of-a-cocktail-napkin>)
- Glenn Suter, *Integrated Environmental Assessment and Management*, ProQuest 210698068 (<https://search.proquest.com/docview/210698068>)

7. Reviews of *A Mathematical Nature Walk*:

- Ray Bert, *Civil Engineering Magazine*, [8] (<https://cedb.asce.org/CEDBsearch/record.jsp?dockey=0173582>)
- Mary Fortune, *The Mathematical Gazette*, doi:10.1017/S0025557200003375 (<https://doi.org/10.1017%2FS0025557200003375>), JSTOR 23248724 (<https://www.jstor.org/stable/23248724>)
- Dominic Lenton, *Engineering & Technology*, [9] (<https://ieeexplore.ieee.org/document/5212698>)
- David S. Mazel, *MAA Reviews*, [10] (<https://www.maa.org/press/maa-reviews/a-mathematical-nature-walk>)
- Cristinel Mortici, MR2512561 (<https://mathscinet.ams.org/mathscinet-getitem?mr=2512561>)
- Svitlana P. Rogovchenko, Zbl 1181.00024 (<https://zbmath.org/?format=complete&q=an:1181.00024>)
- David Royster, *The Mathematics Teacher*, JSTOR 20876779 (<https://www.jstor.org/stable/20876779>)

8. Reviews of *X and the City*:

- David S. Mazel, *MAA Reviews*, [11] (<https://www.maa.org/press/maa-reviews/x-and-the-city-modeling-aspects-of-urban-life>)
- Sandra Arlinghaus, MR2918765 (<https://mathscinet.ams.org/mathscinet-getitem?mr=2918765>)
- Svitlana P. Rogovchenko, Zbl 1257.00009 (<https://zbmath.org/?format=complete&q=an:1257.00009>)

9. Reviews of *Rays, Waves, and Scattering*:

- Georg Hebermehl, Zbl 1386.00065 (<https://zbmath.org/?format=complete&q=an:1386.00065>)
- James A. Lock, *American Journal of Physics*, Bibcode:2017AmJPh..85..880L (<https://ui.adsabs.harvard.edu/abs/2017AmJPh..85..880L/abstract>), doi:10.1119/1.5005527 (<https://doi.org/10.1119/1.5005527>)

[oi.org/10.1119%2F1.5005527](https://doi.org/10.1119%2F1.5005527))

10. "Blood Vessel Branching: Beyond the Standard Calculus Problem" (<https://www.maa.org/programs/maa-awards/writing-awards/george-polya-awards/blood-vessel-branching-beyond-the-standard-calculus-problem>), *MAA Writing Awards*, Mathematical Association of America, retrieved 2021-12-08

External links

- [Home page \(https://ww2.odu.edu/~jadam/\)](https://ww2.odu.edu/~jadam/)
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