Adrian Constantin
Curriculum Vitæ

Faculty of Mathematics, University of Vienna
Oskar-Morgenstern-Platz 1, 1090 Vienna, Austria
☎ *+43 1 4277 50635*
✉ *adrian.constantin@univie.ac.at*
🖑 *https://en.wikipedia.org/wiki/Adrian_Constantin*

Personal data and Research ID's

Born on 22.04.1970 in Timișoara (Romania); Austrian, Romanian and Swedish citizenship
ORCID ID: `https://orcid.org/0000-0001-8868-9305`
Web of Science ResearcherID: A-7868-2012
Scopus Author ID: 7005530386

Research Interests

○ Mathematical Analysis (with emphasis on Partial Differential Equations and Dynamical Systems)
○ Fluid Mechanics (with emphasis on Hydrodynamics)
○ Geophysics (Oceanography and Atmospheric Sciences)

Higher Education

1999 **Habilitation in Mathematics**, *University of Zürich*, Switzerland.

1996 **PhD in Mathematics**, *Courant Institute of Mathematical Sciences, New York University*, USA.

1992 **Diplôme d'Études Approfondies**, *University of Nice*, France.

1991 **Maîtrise de Mathématiques Pures**, *University of Nice*, France.

Appointments

since 2008 **Chair in Partial Differential Equations**, *University of Vienna*, Austria.

2011–2014 **Chair in Analysis**, *King's College London*, United Kingdom.

2004–2008 **Erasmus Smith's Chair of Mathematics (1762)**, *Trinity College Dublin*, Ireland.

2000–2008 **Chair in Mathematics**, *University of Lund*, Sweden.

2000 **Lecturer in Applied Mathematics**, *University of Newcastle*, United Kingdom.

1998–1999 **Oberassistent in Mathematik**, *University of Zürich*, Switzerland.

1996–1998 **Assistent in Mathematik**, *University of Basel*, Switzerland.

Awards and Honours

2024 **Elected member of the Austrian Academy of Sciences**.

2023 **Elected member of the European Academy of Sciences and Arts**.

2022 **Elected member of the German National Academy of Sciences Leopoldina**.

2022 **Elected corresponding member of the Austrian Academy of Sciences**.

2020 **"Wittgenstein" prize**, *Austrian Science Fund (on behalf of the Austrian Ministry for Science)*.

2019 **ISI-Web of Science Highly Cited Researcher (Cross-Field)**.

2010–2018 **ISI-Web of Science Highly Cited Researcher (Mathematics)**.

2008 **"Fluid Dynamics Research" prize**, *Japanese Society of Fluid Mechanics*.

2007 **"F. W. Bessel" prize**, *Humboldt Foundation (Germany)*.

2005 **"G. Gustafsson" prize**, *Royal Swedish Academy of Sciences*.

2001 **Elected member of the Royal Physiographic Society in Lund**, *Sweden*.

1994 **"Benedetto Sciarra" prize**, *Scuola Normale Superiore di Pisa (Italy)*.

Selected Invited Talks

2023 **Plenary speaker**, *Abel Symposium*, Norway.

2022 **Plenary speaker**, *Annual Meeting of the German Mathematical Society (DMV)*, Berlin, Germany.

2015 **Plenary speaker**, *Annual British Mathematical Colloquium*, Cambridge, United Kingdom.

2013 **EMS distinguished speaker**, *26th Nordic and 1st European-Nordic Congress of Mathematicians (dedicated to the memory of L. Hörmander)*, Lund, Sweden.

2012 **Plenary speaker**, *6th European Congress of Mathematics*, Krakow, Poland.

Research Grants (last 10 years)

2021–2026 **Theory and applications of nonlinear partial differential equations**, *FWF-Wittgensteinpreisförderung*, Euro 1.500.000.

2017–2021 **Equatorial wave-current interactions**, *Vienna Science and Technology Fund*, Euro 434.200.

2011–2016 **Nonlinear studies of water flows with vorticity**, *ERC Advanced Grant*, Euro 1.324.797.

2010–2015 **Lagrangian kinematics of water waves**, *Austrian Science Fund (FWF)*, Euro 189.000.

Editorial activity

○ **co-Editor-in-Chief**:
- *Journal of Differential Equations* (since 2015)
- *Monathshefte für Mathematik* (since 2012)

○ **Editorial Board Membership**:
- *Annali di Matematica Pura ed Applicata* (since 2014)
- *Applicable Analysis* (since 2010)
- *Differential and Integral Equations* (since 2014)
- *Discrete and Continuous Dynamical Systems* (since 2010)
- *Dynamics of Partial Differential Equations* (since 2015)
- *Journal of Mathematical Fluid Mechanics* (since 2011)
- *Nonlinear Analysis: Theory, Methods and Applications* (2011–2018)
- *Quarterly of Applied Mathematics* (since 2011)
- *SIAM Journal on Mathematical Analysis* (2012–2016)

Published books and research monographs

1. A. Constantin, *Analysis I*, Springer Spektrum, Berlin, Heidelberg, 2024 (xv+649 pp.)
2. A. Constantin, *Fourier Analysis. Part 1. Theory*, London Mathematical Society Student Texts 85, Cambridge University Press, 2016 (xiv+353 pp.)
3. A. Constantin, *Nonlinear water waves with applications to wave-current interactions and tsunamis*, CBMS-NSF Conf. Ser. Appl. Math. 81, SIAM, Philadelphia, 2011 (xii+321 pp.)

Citations (as of April 2024)

14.514 in the *Mathematical Reviews* database
17.273 in the *Web of Science* database
23.580 in the *Google Scholar* database

Selected research publications

1. A. Constantin, W. Strauss, and E. Varvaruca, Global bifurcation of steady gravity water waves with critical layers, *Acta Mathematica* 217 (2016), 195–262.
2. A. Constantin and J. Escher, Analyticity of periodic traveling free surface water waves with vorticity, *Annals of Mathematics* 173 (2011), 559–568.
3. A. Constantin, The trajectories of particles in Stokes waves, *Inventiones Mathematicae* 166 (2006), 523–535.
4. A. Constantin and J. Escher, Wave breaking for nonlinear nonlocal shallow water equations, *Acta Mathematica* 181 (1998), 229–243