Frederik J Simons

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POSITIONS

2019–present	*Associate Chair of the Department of Geosciences*;
2017–present	*Professor of Geosciences*;
2013–2017	*Associate Professor of Geosciences, with tenure*;
2006–2013	*Assistant Professor of Geosciences*, Princeton University;
2016–present	*Executive Committee Member, Program in Archaeology*;
2012–present	*Associated Faculty, Program in Applied & Computational Mathematics*;
2010–2013	*Dusenbury Preceptor of Geological and Geophysical Sciences,* Princeton U.
2010–2023	*Visiting Fellow*, KU Leuven (Earth & Environmental Sciences);
2018 & 2023	*Member*, Institute for Advanced Study (Astrophysics);
2014–2015	*Visitor*, Institute for Advanced Study (Astrophysics & Cosmology);
2013	*Visitor*, U. Cambridge (Bullard Laboratories);
2012	*Visitor*, U. L. Bruxelles (Applied Mathematics);
2011	*Visiting Fellow*, University College London (Statistical Science);
2010	*Visitor*, V. U. Brussel (Mathematics);
2009	*Visiting Professor*, Institut de Physique du Globe de Paris (Planetary Science);
2008	*Visiting Professor*, Eidgenössische Technische Hochschule Zürich (Geophysics).
2004–2007	*Lecturer of Geophysics*, University College London (UCL).
2002–2004	*Beck Postdoctoral Teaching Fellow*, Council on Science & Technology; *Hess Postdoctoral Fellow*, Geosciences Department, Princeton University.
2002	*Postdoctoral Research Associate*;
1996–2002	*Research & Teaching Assistant*, Earth, Atmospheric & Planetary Sciences, Massachusetts Institute of Technology (MIT).

DEGREES

1996–2002	Massachusetts Institute of Technology, Cambridge, MA; *Doctor of Philosophy* with thesis in Geophysics.
1992–1996	Katholieke Universiteit Leuven, Belgium; *Kandidaat & Licentiaat* with thesis in Geology; *Grootste onderscheiding (summa cum laude).*
1980–1992	Onze-Lieve-Vrouwecollege Jesuit School, Antwerpen, Belgium; *Humaniora*, Latin & Greek. *Primus perpetuus*.

RESEARCH

I am a geologically inspired, geophysically educated, computationally motivated and mathematically minded *geoscientist* interested in the seismic, mechanical, thermal and magnetic properties of the Earth's lithosphere—and of the terrestrial planets and moons. I enjoy analyzing complex, large, and heterogeneous geophysical data sets, and design theoretical and computational inverse methods and statistical techniques to be able to do so—especially for partially observed processes modeled on a sphere. No amount of sophistication can cure a fundamental data limitation: I am developing floating hydrophones to open up the sparsely instrumented oceanic domains for global tomography.

PAPERS

ResearcherID: A-3427-2008. OrcID: 0000-0003-2021-6645. ScopusID: 7102927367.
Reprints: `http://geoweb.princeton.edu/people/simons/reprints.html`
BibTeX: `http://geoweb.princeton.edu/people/simons/fjspubs.html`

AWARDS

2022	Vladimir Keilis-Borok Medal, International Union of Geodesy and Geophysics;
2014–2021	Fellow of the Faculty of Sciences, KU Leuven;
2018	Distinguished Lecturer, Seismological Society of America & IRIS;
2016	Outstanding Reviewer, Geophysical Journal International;
2012	National Science Foundation CAREER Award;
2008	Prix quadriennal *Charles Lagrange*, Académie Royale de Belgique;
2005	Nuffield Foundation Newly Appointed Lecturer Award;
2004	Editors' Citation for Excellence in Refereeing, JGR-Planets, AGU;
2002	Beck Fellowship, Council on Science & Technology, Princeton;
2001	Outstanding Student Paper Award, Seismology Section, AGU;
1998	Victor J. DeCorte Fellowship, MIT;
1997&1998	Teaching Assistant Excellence Awards, EAPS, MIT;
1997	Biennial prize for an M. Sc. thesis in Geology, Katholieke Universiteit Leuven;
1996–2001	Fulbright Fellowship, Commission for Educational Exchange;
1996–1997	Honorary Fellowship, Belgian-American Educational Foundation;
1996–1997	Ambassadorial Scholarship, Rotary International Foundation.

SEMINARS

Invited Lectures in Academic Geoscience Departments:	110
Invited Lectures in Various Other Departments & Outreach Events:	64
Invited Conference Presentations:	64
Co-Organizer of International Meetings & Special Sessions :	27

SERVICE

Editorial

Associate Editor, *Geophysical Journal International*, 2017–2022;
Advisory Board, *Springer Geosystems Mathematics* Books, since 2014;
Editor, *International Journal on Geomathematics*, 2010–2025;
Editorial Advisory Board, *Journal of Geodetic Science*, 2010–2025;
Editorial Advisory Board, *Earth & Planetary Science Letters*, 2007–2018;
Associate Editor, *J. Geophysical Research (Solid Earth)*, 2004–2009.

Refereeing

348 papers and proposals for 85 journals and organizations.

Community

Member, *EarthScope Consortium* Inaugural Board of Directors, 2022–2024;

President, *Earthscope-Oceans* Steering Committee, since 2016;

Member, *Global Seismograph. Network* Standing Committee, IRIS (2021–2024);
Member, *Comput. Infrastructure Geodyn.* Executive Committee, 2016–2019;
Member, *EarthScope* Education and Outreach SubCommittee, 2014–2019;

Princeton

Doctoral Exam Committees:	24
General Exam Committees:	48
Senior Theses Advised:	10
Junior Papers Advised:	18

External

Doctoral Exam Committees:	23
Master's Degree Exam Committees:	3