

Frederik J Simons — *Brief Bio* — August 3, 2022

Frederik Simons is a geophysicist at Princeton University. Usually from the safety of his office, he analyzes data from digital global seismic networks to study the physical properties of the interior of the solid Earth, from gravity satellite missions to weigh the ice sheets melting off its surface, and from magnetometers to characterize the lithospheric magnetic field of the Earth and terrestrial planets. To help increase seismic station coverage around the globe, he has left his comfort zone of theory and modeling to develop MERMAID: floating earthquake recorders in the oceans, deploy them at sea, and promote their use for Earth observation through the international academic consortium “EarthScope-Oceans” as its Founding President. Most lately he has collaborated on the design and development of GNSS-acoustic procedures and equipment to monitor geodetic position and displacement on the very deep sea floor over very long temporal baselines, via continuously operating reference stations surveyed by uncrewed surface vessels.

Simons joined the Princeton faculty in 2006, where he is now a Full Professor (since 2017) and Associate Department Chair (since 2019) of the Department of Geosciences, and the Chair of its Diversity Committee (since 2013). He is also an Associated Faculty member in the Program in Applied & Computational Mathematics, serves on the Executive Committee of the Program in Archaeology, and is affiliated with the High Meadows Environmental Institute and the Andlinger Center for Energy and the Environment. Between 2010 and 2013, Simons was the Dusenbury University Preceptor of Geological & Geophysical Sciences. Previously, he was a Lecturer at University College London, a Princeton Council of Science & Technology Beck Fellow and a Department of Geosciences Hess Post-doctoral Fellow. Simons received a Ph.D. in Geophysics from M.I.T. and his M.Sc. in Geology from the KU Leuven in Belgium, of which he is a native.

Simons has served on a number of relevant committees, most notably on the EarthScope Education & Outreach Subcommittee (2014–2019), and on the Global Seismographic Network Standing Committee (2021–2024). As a candidate for Board membership of the combined EarthScope organization, he will continue to serve the interests of the seismological and geodetic academic communities, in a manner that recognizes their joint goals and common interests, and leverages their collective competencies.