



Domenico Giardini, IUGG Fellow

SWITZERLAND

Domenico Giardini is Chair of Seismology and Geodynamics at the ETH Zürich, Switzerland, since 1997.

Prof. Giardini was born on March 19, 1958 in Bologna, Italy. He studied Physics and completed his doctorate in 1987 at the University of Bologna. He worked as postdoctoral fellow at Harvard University (1982-1986), researcher at the National Institute of Geophysics in Rome (1987-1992) and Associate Professor of Seismology at the University of Rome III (1992-1997), before joining ETH.

He was the Director of the Swiss Seismological Service until 2011 and President of the Italian National Institute of Geophysics and Volcanology in 2011-2012.

He directed the Swiss Competence Center for Environment and Sustainability (CCES, 2006-2009) and since 2013 leads the Swiss Competence Center for Energy Research – Supply of Electricity (SCCER-SoE). He directed the Seismic Risk Sector of the Italian High Risk Commission and was a member of the Nuclear Earthquake Safety Commission of Switzerland. He chairs the Scientific Advisory Council of the Helmholtz Geosciences Center Potsdam (GFZ).

He was Chair of the Organizations & Research Facilities for European Seismology (ORFEUS, 1999-2007), President of the European Seismological Commission (ESC, 2006-2008), Secretary (1989-1994) and Chair (2002-2007) of the International Federation of Seismic Networks (FDSN, 2002-2007), and President of the International Association of Seismology & Physics of the Earth Interior (IASPEI, 2011-2015). He is member of the IUGG Visioning Committee and IASPEI Representative Member in the Union Commission on Climatic and Environmental Change (CCEC).

He coordinated international projects for the European Commission (NERIES, SHARE, NERA, STREST, SERA), UNESCO, the UN, NASA, ESA and the OECD. He was one of the initiators of EPOS - the European Plate Observing System.

He is a Co-PI of the ESA LISA Pathfinder and the LISA missions, for the detection of gravitational waves in space, and of the NASA InSight mission, which installed a seismometer on Mars in 2019.

He directed the Global Seismic Hazard Assessment Program of the UN/International Decade for Natural Disaster Reduction (IDNDR) and was a co-founder of the Global Earthquake Model initiative.

He co-authored over 280 publications in international peer-reviewed journals, covering deep earthquakes, Earth free oscillations, mantle and core structure and dynamics, moment tensor inversion, waveform modeling in complex media, seismic hazard and risk assessment, microzonation, planetary seismology, induced seismicity, societal applications, geo-energies, energy systems, deep underground laboratories, detection and characterization of gravitational waves, Mars seismicity and internal structure.

He was Visiting Professor at Caltech and Nanyang Visiting Professor at NTU, Singapore. He is Honorary Fellow of the Royal Astronomical Society, UK, and was elected in 2018 to the Academia Europaea.