Curriculum Vitae Prof. Dr. Hans Joachim Schellnhuber

Photo: PIK/ Klemens Karkow

Name: **Hans Joachim Schellnhuber**

Born: **7 June 1950**

Main Research Interests: Condensed matter physics, complex systems dynamics, climate change research, Earth System analysis, sustainability science

Hans Joachim Schellnhuber has made numerous important contributions to theoretical physics, both to the foundations of the field (condensed matter, complex dynamics) and to its applications (climate & environmental systems analysis). His research in solid state physics (inter alia, at UC Santa Barbara's ITP) focused on the behaviour of electrons in almost periodic/fractal fields and generated crucial results on the Fibonacci Hamiltonian and the Frenkel-Kontorova chain.

Academic and Professional Careeer

Visiting Professor at Tsinghua University, China

1993 - 2018	Director of the Potsdam Institute for Climate Impact Research (PIK), in conjunction with a Chair for Theoretical Physics at the University of Potsdam, Germany
2005 - 2009	Visiting Professor for Physics, Honorary Member of Christ Church College and Senior James Martin Fellow at the University of Oxford, UK
2001 - 2005	Additional engagement as Research Director of the Tyndall Centre for Climate Change Research and Professor at the Environmental sciences School of the University of East Anglia, Norwich, UK
1992	Managing Director of the Interdisciplinary Institute for Coastal Environment Studies (ICBM), University of Oldenburg, Germany
1991	Founding Director of the Potsdam Institute for Climate Impact Research (PIK), Germany
1988 - 1993	Full Professor for Theoretical Physics, University of Oldenburg, Germany
1987 - 1989	Fellow of the Heisenberg Programme of the German Science Foundation (DFG)

1987 - 1988	Visiting Professor at the Institute of Nonlinear Sciences, University of California, Santa Cruz, USA
1982 - 1987	Assistant Professor in the Physics Department, University of Oldenburg, Germany
1985	Habilitation (Qualification as University Lecturer) for Theoretical Physics, University of Oldenburg, Germany
1981 - 1982	Postdoctoral Fellow at the Institute for Theoretical Physics (ITP), University of California, Santa Barbara, USA
1980	Ph.D. in Theoretical Physics, University of Regensburg, Germany
1976 - 1981	Scientific Assistant in the Physics Department, University of Regensburg, Germany
1976	Physics Degree (First Class Honours)
1971 - 1976	Student Assistant in the Physics Department, University of Regensburg, Germany
1970 - 1976	Study of Physics and Mathematics at the University of Regensburg, Germany

Honours and Awarded Memberships (Selection)

2021	Knight of the Legion of Honor, France
2021	Grand Cross of Merit of the Order of Merit of the Federal Republic of Germany
2017	Blue Planet Prize of the Asahi Glass Foundation, Japan
2015	Member of the Pontifical Academy of Sciences, Vatican City
2011	Honorary Doctorate of the University of Copenhagen, Denmark
2011	Order of Merit of the Federal Republic of Germany
2011	Volvo Environment Prize
2009	Ambassador of Science of the State of Brandenburg, Germany
2008	Order of Merit (“Roter-Adler-Orden”) of the State of Brandenburg, Germany
2008	Environment Prize of the Bundesdeutscher Arbeitskreis für Umweltbewusstes Management (B.A.U.M)
2007	German Environment Prize by the Deutsche Bundesstiftung Umwelt (DBU)
2004	Honorary CBE (Commander of the Most Excellent Order of the British Empire) awarded by Queen Elizabeth II
2002	Wolfson Research Merit Award and Research Fellowship of the Royal Society
1987	Heisenberg Fellowship of the German Science Foundation (DFG)
1970	Bavarian Scholarship for the Exceptionally Gifted

Major Scientific Interests

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& environmental systems analysis). His research in solid state physics (inter alia, at UC Santa Barbara's ITP) focused on the behaviour of electrons in almost periodic/fractal fields and generated crucial results on the Fibonacci Hamiltonian and the Frenkel-Kontorova chain.

Schellnhuber conducted his more applied research particularly at the Potsdam Institute for Climate Impact Research, which he founded in 1992 and which he has headed ever since (partly in parallel to engagements abroad, such as the director post at the British Tyndall Centre). The topical foci in this context are stability analysis of the Earth System, climate impacts assessment and sustainability science. Schellnhuber's ideas have been seminal for the international development of those areas. Only recently, he was able to demonstrate (together with colleagues from several countries) that unabated anthropogenic global warming is likely to activate large-scale tipping elements, thereby triggering irreversible environmental impacts.