# FALLING WALLS FOUNDATION



# Professor Jürgen Mlynek

## **Summary**

Mlynek studied physics from 1970 to 1976 at the Technical University of Hannover and at the École Polytechnique in Paris. In 1979, he obtained his doctor's degree and habilitated in 1984. Between 1976 and 1981, Mlynek was a scientific assistant in Hannover and in 1982 he worked for one year as a post-doctoral fellow with the IBM Research Laboratory in San Jose, California. After three years as academic assistant in Hannover he became a Heisenberg fellow of the German Research Foundation (DFG – Deutsche Forschungsgemeinschaft) in 1985 and served as assistant professor at the ETH Zurich from 1986 to 1990.

In 1990, Mlynek became a full professor for experimental physics at the University of Konstanz. There he realized an atom inferometer for the first time and conducted groundbreaking experiments in the field of atom optics and quantum optics. Among them are his works on the Heisenberg microscope and the measurement of the Wigner function of the quantum state of matter and light. Since 2000 he has been professor for experimental physics at the Humboldt University of Berlin.

From 1996 to 2001, he was vice president of the German Research Foundation (DFG) where he dedicated himself to encouraging young academics. Between 2000 and 2005, Mlynek was president of the Humboldt University. In 2005, shortly after his reelection as president of the Humboldt University, Mlynek switched to the Helmholtz Association of German Research, Germany's largest science organization, and became president. In June 2009, he was reelected for a second and last presidential term (2010-2015). During his presidency, program-oriented research was enhanced and the Helmholtz mission was strengthened in terms of strategic research for the national benefit. In addition, he developed new tools of strategic cooperation with universities like Helmholtz alliances and Helmholtz Institutes.

In 2006, Mlynek was one of the co-founders of the foundation "Haus der kleinen Forscher" which was supported by the Helmholtz Association from the beginning. It has now become the most successful initiative on education for young children in the German speaking countries. Furthermore, he established the Helmholtz Management Academy for teaching management techniques in the domain of science. The academy is also open to partner organizations and universities.

Since 2016 he is professor emeritus at the physics department of the Humboldt University.

Jürgen Mlynek chairs the Strategic Advisory Board of the Quantum Flagship, a research and innovation initiative funded by the European Commission. Among his offices are Chairman of the Board of Trustees at the Falling Walls Foundation, Chairman of the Foundation Board at the "Haus der kleinen Forscher", Chairman of the Wilhelm und Else Heraeus Foundation, as well as member of various university and science committees.

# Academic Positions

04/2016-present	Professor Emeritus of Experimental Physics, Humboldt University of Berlin, D
02/2016-03/2016	Visiting Scientist at SLAC, Stanford, CA, USA
09/2000-03/2016	Professor of Experimental Physics, Humboldt University of Berlin, D
09/2005-08/2015	President of the Helmholtz Association of National Research Centres, D
09/2000-08/2005	President of the Humboldt University of Berlin, D
04/1990-08/2000	Professor of Experimental Physics, University of Konstanz, D
10/1986-03/1990	Assistant Professor, Swiss Federal Institute of Technology (ETH) Zürich, CH





02/1982-08/1982 Postdoctoral Researcher, IBM Research Laboratory, San Jose, CA, USA 04/1976-09/1986 Research Assistant and Senior Researcher, Institute of Applied Physics,

University of Hannover, D

#### **Education**

10/1970-04/1976 Studies at the Technical University of Hannover, D and the Ecole Polytechnique,

Paris D

07/1969-10/1970 Basic Military Service, Federal Armed Forces, Hannover, D

03/1967-06/1969 Abitur, German university entrance qualification, Leibniz School Hannover

Secondary school, D

### **Publications**

Prof. Dr. Mlynek has published approximately 240 publications in peer-reviewed journals, with a thematic focus on Experimental Quantum Optics, Atomic Physics, and Surface Physics (h-index: 48, STC: 8,600).

### Awards and Recognition

Prof. Dr. Mlynek has received a number of highly recognized awards, including "Goldenes Ehrenzeichen für Verdienste um die Republik Österreich" (2019), "Ehrenring der Stadt Garbsen" (2014), "Ehrendoktorwürde der Fakultät für Naturwissenschaften der Universität Ulm" (2012), "Verdienstkreuz 1. Klasse des Verdienstordens der Bundesrepublik Deutschland" (2010), "Verdienstorden des Landes Berlin" (2008), "Urania – Medaille" (2003), "Max-Born-Preis und -Medaille des Institute of Physics und der Deutschen Physikalischen Gesellschaft" (1996), "Gottfried-Wilhelm-Leibniz Preis der Deutschen Forschungsgemeinschaft" (DFG) (1992), and "Physik-Preis der Deutschen Physikalischen Gesellschaft" (1987).

## Leadership and other Activities

Chairman, Strategic Advisory Board, European Quantum Technology Flagship Initiative; Chairman, Board of Trustees, Falling Walls Foundation; Chairman, Board of Trustees, Haus der kleinen Forscher; Chairman, Board of Directors, WE Heraeus Foundation; Member, Supervisory Board, Georg v. Holtzbrinck Publishing Group and Carl Zeiss Company.