

# Curriculum Vitae of Jürg Fröhlich

**Name:** Jürg (Martin) Fröhlich (Professor emeritus of theoretical physics, ETH Zurich)

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I was born on July 4, 1946, at Schaffhausen, a city in the north of Switzerland. At the public and high school (“Gymnasium”) of Schaffhausen, I got a classical education, including Latin, modern languages (German, French, English and some Italian), natural sciences and mathematics. In 1965, after having passed the final high school exam (called “Maturität” in German-speaking Switzerland), I was accepted as an undergraduate student at the Department of Mathematics and Physics of the Swiss Federal Institute of Technology (ETH) in Zurich. In the spring of 1969, I wrote my diploma thesis (“Dressing Transformations in Quantum Field Theory”) under the supervision of Prof. Dr. K. Hepp and Prof. Dr. R. Schrader. In the fall of the same year I passed the oral examinations of the ETH-diploma in physics. For my diploma thesis and my examination score I received honours.

From October 1969 until October 1972 I worked at the “Seminar für Theoretische Physik” of the ETH under the supervision of Prof. Dr. K. Hepp. In the fall of 1972 I got my Ph.D. in theoretical physics with honours. Topic of PhD thesis: Infrared problem in a model of a non-relativistic particle coupled to a massless quantum field.

From October 1972 till August 1973 I worked as a research and teaching assistant at the physics department of the University of Geneva.

From September 1973 till August 1974 I was a research fellow in the mathematical physics group of Prof. Dr. Arthur M. Jaffe at Harvard University.

In September 1974, I got appointed as an assistant professor at the mathematics department of Princeton University, where I worked until December 1977.

From January 1978 till July 1982 I held the position of “professeur permanent” at the Institut des Hautes Etudes Scientifiques (IHES) at Bures-sur-Yvette, near Paris.

In July 1982, I followed a call from ETH-Zurich, received in spring 1981, and joined the physics faculty of ETH. During almost thirty years, I was struggling with trying to fulfil the diverse obligations and duties of an ETH-professor, with varying success. In 1985, the “Center for Theoretical Studies” (now called “Pauli Center”) at the Institute of Theoretical Physics of ETH, a framework permitting us to invite visiting scientists and guest lecturers, was created on my initiative.

In the fall of 2011, I retired from my professorship at ETH Zurich. In the spring of 2012, I spent four months at the “Zentrum für interdisziplinäre Forschung” of the University of Bielefeld, where my friend Philippe Blanchard and I animated a program on quantum science (resulting in the publication of volume 899 of ‘Lecture Notes in Physics,’ entitled “The Message of Quantum Science,” Springer-Verlag, 2015). Starting in the fall of 2012, I was a visiting professor at the School of Mathematics of the Institute for Advanced Study at Princeton for a little more than two academic years. In 2015, I spent four months at IHES, where I organised a program of lectures and

seminars on quantum theory. In 2019 I taught a short course on quantum theory at the Ludwig-Maximilians University (LMU) in Munich.

I gave invited addresses at A.M.S. meetings and at the International Congress of Mathematicians in Helsinki, 1978. I participated as an invited lecturer at numerous conferences and schools in theoretical physics. In April 1981, I served as a Loeb Lecturer at Harvard University. In June 1992, I presented an invited address to the first European Congress of Mathematicians in Paris. In 1994, I gave a plenary lecture to the International Congress of Mathematicians in Zurich. In the spring of 1998, I was an “Andrejewski lecturer” in Berlin and, in 2001, I gave a series of “Andrejewski lectures” in Leipzig.

I have visited numerous academic institutions in Europe, North America, India and Japan.

In 1984, I was awarded the “National Latsis Prize” of the Swiss National Foundation. More recently, my friend Thomas C. Spencer of the Institute for Advanced Study and I jointly received the 1991 Dannie Heineman Prize in Mathematical Physics, a prize awarded by the American Physical Society and the American Institute of Physics. I was also awarded the Marcel-Benoist Prize in 1997, and, in 2001, the Max-Planck Medal of the German Physical Society. In 2009, I received the Henri Poincaré Prize of the International Association of Mathematical Physics sponsored by the Daniel Iagolnitzer Foundation. I am a member of the “Academia Europaea” and, more recently, I have been elected an associate member of the “Berlin-Brandenburgische Akademie der Wissenschaften” and of the “Akademie der Wissenschaften und der Literatur” in Mainz. I am a “Fellow of the American Mathematical Society”. In 2020, I was elected an “International Member of the National Academy of Sciences” (USA). I have an honorary degree of the University of Zurich. In 2001, I have been offered a “Louis-Michel visiting professorship” at IHES, which expired several years later.

Since August 1972, I have been married with Eva Fröhlich-Schubert (born in Prague in 1947). We have two daughters, Judith (born August 13, 1973) and Sonja (born July 3, 1975) and six grandchildren.