Franc Forstnerič: biography (January 2024)

Franc Forstnerič was born on 1 May 1958 in Ljubljana, Slovenia. He graduated from the University of Ljubljana in 1980 and obtained Ph.D. degree in mathematics from the University of Washington in Seattle, USA in 1985. In the same year, he became employed by the University of Ljubljana where he was assistant professor of mathematics (1986-89) and associate professor (1989-93). In 1991 he took the position of a visiting professor at the University of Wisconsin-Madison in USA. In 1993 he became a tenured associate professor and in 1994 a full professor of mathematics at University of Wisconsin-Madison. In 1994 he was also named full professor of mathematics at University of Ljubljana, where he is currently employed. He served two terms 2007-2009 and 2011-2013 as dean of the Faculty of Mathematics and Physics, University of Ljubljana. During 2000-2005 he was the national coordinator of mathematics in Slovenia and during 2000-2004 a member of the Prize Commission of Republic of Slovenia. In 2011 he was chairman of the board of natural sciences of the Slovenian Research Agency.

Forstnerič spent protracted periods as a visiting researcher and guest lecturer at several universities and research institutes worldwide. He was invited guest lecturer at over a hundred international conferences worldwide, and he participated on programming committees of over 30 scientific conferences. As a reviewer and expert panel member, he participated in the evaluation of scientific projects with the National Science Foundation in USA, the Swedish Science Foundation, the Royal Swedish Academy of Sciences, and the science agencies of the Chech Republic, Italy, Montenegro, Poland, and Switzerland.

Forstnerič achieved his most notable scientific results tackling problems of complex analysis and geometry: boundary regularity of proper holomorphic maps, polynomial convexity, proper holomorphic maps and embeddings into Euclidean spaces and other complex manifolds, holomorphic automorphisms of Euclidean spaces and their applications, construction of noncritical holomorphic functions on Stein manifolds and Stein spaces, the Oka principle and its application to complex geometry, and nonlinear holomorphic approximation theory. Following a decade of intensive research in the Oka-Grauert-Gromov theory, Forstnerič introduced in the literature a new class of complex manifolds, called Oka manifolds, and he presented a comprehensive treatment of this subject in his monograph Stein Manifolds and Holomorphic Mappings published by Springer-Verlag in 2011, with the second edition in 2017. Oka manifolds have since become a standard notion in complex analytic geometry. The 2020 Mathematical Subject Classification introduced the new subclass 32Q56 Oka principle and Oka manifolds. In the last decade he made significant contributions to the theory of minimal surfaces and complex contact geometry. He authored or coauthored 144 scientific publications, including two books published by Springer. Several of his papers are published in leading mathematical journals such as Annals of Math., Acta Math., Inventiones Math., Duke Math. J., Amer. J. Math., Memoirs AMS, J. Europ. Math. Soc., J. Math Pures Appl., Analysis & PDE, Math. Ann., Geometry & Topology, and others. He is a highly cited scientist in his field. His research has been supported continuously over the last four decades by various funding agencies. In 2022 he received a 5-year ERC Advanced Grant financed by the European Union.

Forstnerič received several prizes and recognitions. During PhD studies he was a Fulbright Scholar and a recipient of a Sloan Predoctoral Fellowship. In 1988 he received the Boris Kidrič prize for scientific achievements from Republic of Slovenia. During his tenure at the University of Wisconsin in Madison he received a Vilas Associates Award. He was elected associate member of Slovenian Academy of Sciences and Arts in 1999 and became its full member in 2005. During 2017-2020 he was secretary of the division of mathematical, physical, chemical, and technical sciences of the Academy, and since June 2020 he is Secretary General of the Academy. In 2019 he received the prestigious Stefan Bergman Prize awarded by the American Mathematical Society. He was an invited plenary speaker at the 8th European Congress of Mathematics in 2021.