

Professor Rolf Eckmiller, Ph.D.

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Abstract

'The Future of Intelligent Neuroprosthetic Implants'

Speaker biography

Professor Rolf Eckmiller

Rolf Eckmiller is Professor of computer science in the Department of Computer Science at the University of Bonn / Germany.

From 1972 to 1973 and from 1977 to 1978, he was a visiting scientist at the University of California at Berkeley and the Smith-Kettlewell Eye Research Foundation in San Francisco.

From 1979 to 1992, he was Professor and Head of the Division of Biocybernetics at the University of Düsseldorf.

Dr. Eckmiller has directed several research projects funded by the German Science Foundation (DFG) and the National Eye Institute on the neurophysiology and biophysics of vision, eye movements, and eye-head coordination in primates.

He has also directed several research projects funded by the German Federal Research Ministry (BMBF) on the control of intelligent sensorimotor systems with learning algorithms.

In 1991, Dr. Eckmiller has organized (funded by the BMBF) an international research initiative for neurotechnology (retina implant, functional electrical stimulation) to link pulse processing neural computers with the human nervous system.

In 1996, he initiated the research team 'EPI-RET' (funded by the BMBF) for the development of a learning retina implant.

Dr. Eckmiller is a member of various societies, including the International Neural Network Society, Society of Neuroscience, and ARVO.

He is a senior IEEE member. Several of his inventions have been patented.

Dr. Eckmiller has a Ph.D. in Communication Engineering from the Technical University of Berlin and has the Habilitation in Neuro- and Sensory Physiology from the Medical Faculty of the Free University of Berlin.