ISPM	Institute of Social and Preventive Medicine
BIHAM	Berner Institut für Hausarztmedizin
CTU	Clinical Trial Unit

u^b

UNIVERSITÄT
BERN

Prof. Dr. Joachim M. Buhmann (1959) is full professor for Computer Science at ETH Zurich since 2003 representing the research area "Information Science and Engineering". He studied physics at the Technical University of Munich and received a doctoral degree for his research work on artificial neural networks. After research appointments at the University of Southern California (1988-1991) and at the Lawrence Livermore National Laboratory (1991-1992) he served as a professor for applied computer science at the University of Bonn (1992-2003). His research interests range from statistical learning theory to applications of machine learning and artificial intelligence. Research projects are focused on topics in neuroscience, biology and medical sciences, as well as signal processing and computer vision. He has presided the German Society for Pattern Recognition (DAGM e.V.) from 2009-2015. From 2014-2017, he serves as Vice-Rector for Study Programmes at ETH Zurich. In 2017, he was elected as a member of the Swiss Academy of Technical Sciences SATW and as an honorary member of the German Pattern Recognition Society DAGM.

«Data Science for Health: We need resilient algorithms»

Modern medicine gathers large amounts of very heterogeneous data, ranging from genomics information, proteomics data to histological samples and imaging data of brain and body scans. These medical data sources are enhanced by annotations of medical experts, by environmental and life style information. Data science faces the challenge to extract the relevant bits for diagnosis, prognosis and therapy. Often, algorithm engineers have to design and optimize complex data processing pipelines which have to cope with significant uncertainty and noise. We will demonstrate a machine learning framework to design resilient algorithms for problems in neuroscience and in cancer diagnostics.

Join the seminar on Thursday, January 17, 2019 at 4:00 pm in room 324!

Thursday Seminar