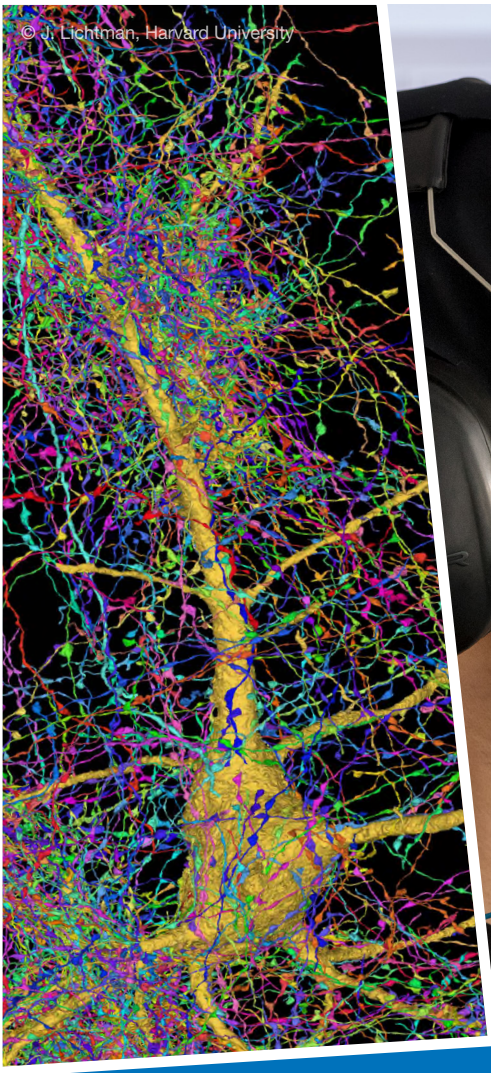
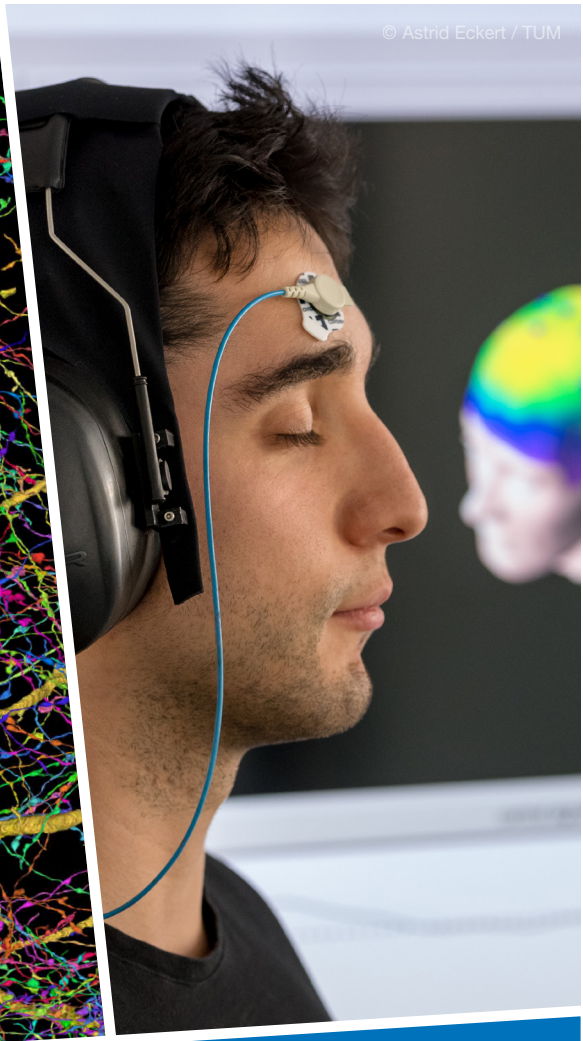
Elitenetzwerk Bayern





Elite Network of Bavaria FORUM
on Neuroscience and Neuroengineering:

From Connectomes to Brain Computer Interfaces

March 23, 2023 / TUM Audimax

Program

17:00 Arrival & Registration

18:00 Welcome Address

18:15 Mapping the Brain's Synapses to Explore the Mind
by Prof. Jeff W. Lichtman, MD, PhD | Harvard University

19:00 Personalized Closed-loop Neurostimulation for Functional and Cognitive Benefits by Prof. Dr. Stanisa Raspopovic | ETH Zurich

19:45 Reception | finger food / drinks

In the Audimax Foyer:
Live Jazz music by Andreas Kurz and the Thursday chill-out Combo
Student poster exhibition by students of both Elite Graduate Programs

Attendance requires your electronic registration, please click here.
Deadline for your registration is **March 10th 2023.**

FORUM

The Elite Network of Bavaria FORUM is an event series that began in 2011 under the sponsorship of the Elite Network of Bavaria. This event series alternates between Bavarian Universities, with the goal of exposing interested members of society to the research and academics of the Elite Network.

The 11th event in this series will take place at TUM and is jointly hosted by the two TUM Elite Graduate Programs in Biomedical Neuroscience and in Neuroengineering. Our guest speakers for the evening are Jeff W. Lichtman (Harvard University) and Stanisa Raspopovic (ETH Zurich), each highlighting impressive advances in the fields of Neuroscience and Neuroengineering in recent years.

Elite Network of Bavaria

The Elite Network of Bavaria supports gifted young people and helps them to forge their own path, from the time they leave school through to the postdoc phase. The members are united by a shared commitment to act responsibly in shaping the world of tomorrow.

The Elite Network of Bavaria was founded in 2004 to promote outstanding, talented young academics. Whether a school leaver, student or doctoral researcher, five coordinated funding programs provide ideal conditions for research and study in every phase of an academic career. The Elite Network of Bavaria now comprises over 13000 members and continues to grow.

www.elitenetzwerk.bayern.de

Mapping the Brain's Synapses to Explore the Mind

by Prof. Jeff W. Lichtman, MD, PhD (Harvard University)

Professor Jeff W. Lichtman
© Rick Friedman

Jeff W. Lichtman is Jeremy R. Knowles Professor of Molecular and Cellular Biology and the Ramón y Cajal Professor of the Faculty of Arts and Sciences at Harvard University. Lichtman is a developmental neurobiologist interested in the way in which experience alters nervous system organization in long lasting ways.

He has participated in the development of several methods that describe neural connectivity at the level of individual synapses (connectomics) using fluorescence (e.g., Brainbow) and electron microscopical methods (e.g., ATUM). Lichtman graduated from Bowdoin College with a degree in Biology and from Washington University School of Medicine in 1980 with a Ph.D. in Neurobiology and a M.D.

After postdoctoral work at Harvard Medical School, Lichtman joined the faculty of Washington University and remained there for twenty years before moving to his present position at Harvard in 2004.

Personalized Closed-loop Neurostimulation for Functional and Cognitive Benefits

by Prof. Dr. Stanisa Raspopovic (ETH Zurich)

Stanisa Raspopovic has been an Assistant Professor of Neuroengineering at the Department of Health Sciences and Technology of the Swiss Federal Institute of Technology, Zurich, Switzerland since 2018. His research interest is focused on the development of innovative medical devices for treatment of neurologically disabled persons. In particular, he develops mechatronic systems directly interfacing the environment with the residual nervous system.

Professor Stanisa Raspopovic
© ETH Zürich / Daniel Winkler

Raspopovic achieved groundbreaking translational research results in the field of sensory restoration in amputee patients. By means of neuroprosthetic intervention, his group has shown that restoration of foot and knee sensations via neural implants, reduces pain, metabolic cost and mental fatigue in above-knee amputees, while enhancing functionality, confidence and acceptance of the prosthesis. These efforts are now expanded to the treatment of pain, diabetes and stroke.

He is project leader of several European and Swiss grants, and is presently principal investigator of a prestigious ERC Starting Grant (‚FeelAgain‘).

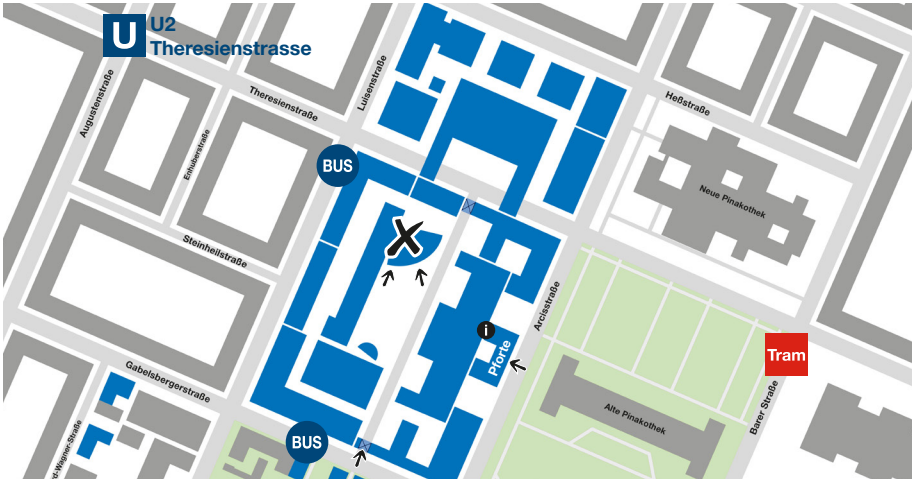
Live Jazz Performance

Thursday chill-out Combo
Johannes Ludwig - sax | johannesludwig.com
Alexander Parzhuber - drums
Alexander Maier - guitar
Andreas Kurz - bass | andreaskurz.com

Andreas Kurz | © Tim Allhoff

Andreas Kurz (*1979) studied double bass in Munich at the University of Music and Performing Arts with Prof. Klaus Trumpf and at the Richard Strauss Conservatory with Paolo Cardoso. Kurz became a member of the »Landes-Jugendjazzorchester Bayern« and the »Bundesjazzorchester« already before his university studies.

Location and Direction



From Munich main train station (Hauptbahnhof) it is a walk of about 15 minutes to the conference site: **TU Munich, Arcisstrasse 21**

Guests may use the **underground U2** (direction „Feldmoching“).
Please exit the train at „Theresienstrasse“.
Guests **arriving by car** may use parking lots at Arcisstrasse (for a fee).

The FORUM organisation team will help you with all your questions:
enb-forum.mec@med.tum.de