Nachrichten

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Bernstein Conference on Computational Neuroscience 2019

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The annual Bernstein Conference is one of the top meetings in the field of computational neuroscience. Having started out as the ‘Bernstein Symposium’ in 2005, an annual meeting organized for members of the Bernstein Network, it soon turned into a highly reputable international conference on computational neuroscience.

In the many subdisciplines of neuroscience, computational neuroscience is a bridge discipline connecting experimentally and theoretically working researchers. This is reflected very well in the list of this years’ invited speakers, all of whom well-established experts in their fields with backgrounds in experimental and/ or theoretical neuroscience. This year’s speakers are Eve Marder (USA), Matthias Bethge (Germany), Dora Angelaki (USA), Matthew Botvinick (USA), Claudia Clopath (UK), Nicolas Brunel (USA), Hopi Hoekstra (USA), Gilles Laurent (Germany), Haim Sompolinsky (USA/ Israel), Gašper Tkačik (Austria) and Nachum Ulanovsky (Israel). Their talks will reveal how closely theory and experiment are intertwined on the way to understanding the functionality of the brain.

Susanne Schreiber, organizer of the conference, is pleased that so many acclaimed international researchers have accepted the invitation to Berlin. “I am confident that excellent research in biology benefits from a strong theoretical component. Especially in the days of “big data” and artificial intelligence, the interdisciplinary focus of computational neuroscience is highly relevant for the neurosciences.”

Promoting young scientists

In addition to attracting many established international speakers, young scientists are a key concern of the Bernstein Conference as it is the platform for networking on all career levels. One highlight of the Bernstein Confer-

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ence 2019 will be the presentation of the Brains-for-Brains Award, the Bernstein Network’s young researchers’ award, which recognizes the special achievements of young scientists who have shown their outstanding potential at a very early career stage – even before starting their doctoral studies. The award will be conferred for the 9th time. Past winners came from Australia, USA, Israel, France, Italy, Canada, the UK and Cuba. Apart from this award, young scientists are also supported with travel grants, which facilitate access to the Bernstein Conference and the attached events for PhD candidates and postdocs to network amongst their peers.

A platform fostering scientific and public debate

Whether trying to elucidate the neural code for cognition or perception with the help of model organisms, or using machine learning to study such neuroscientific questions – to name but two of the many research topics – computational neuroscience makes a decisive contribution to cutting-edge research, be it in contested fields like artificial intelligence or big data management. The Satellite Workshops preceding the main conference are an ideal platform to discuss topical research questions, novel scientific approaches as well as challenges and controversial issues in computational neuroscience. Apart from fostering the scientific debate within the community of scientists, the Bernstein Conference also reaches out to the general public. The conference program always includes a public evening event, which explicitly addresses a general audience and provides a scientific perspective on current topics and debates.

In 2019, the Bernstein Conference takes place back-to-back with the Conference on Cognitive Computational

Neuroscience CCN in Berlin, offering two excellent opportunities for international scientific exchange in the field of computational neuroscience in Europe.

Strong network in the background

The Bernstein Network Computational Neuroscience supports science, research and education in computational neuroscience, and disseminates research themes and findings to the public. It is recognized as a non-profit organization. The network started in 2004 with a funding initiative of the Federal Ministry of Education and Research (BMBF) to develop and interconnect research structures in computational neuroscience throughout Germany and to promote the transfer of theoretical insight into clinical and technical applications. With the Bernstein Conference the network organizes the largest annual computational neuroscience conference in Europe.

The interdisciplinary dialog between experimentally and theoretically working scientists is of utmost importance and is fostered at all Bernstein sites. The Bernstein

Network Computational Neuroscience promotes research and teaching in computational neuroscience with a clear commitment to equal opportunities. On a cross-institutional scale, the Bernstein Network offers the **SMART-START** Joint Training Program in Computational Neuroscience, which specifically prepares young researchers for the interdisciplinary nature of computational neuroscience, embedding them in a strong research network at a very early career stage. Furthermore, the network takes care that the composition of its committees and the selection of speakers for events like the Bernstein Conference is gender balanced.

The Bernstein Network Computational Neuroscience is open to all researchers in the field or related subjects. Members not only benefit from a cooperative and cutting-edge research network in computational neuroscience, they can also rely on the network's central facilities: SimLab Neuroscience, the Bernstein Facility for High Performance Simulation and Data Analytics, facilitates the

use of the parallel computing resources at Forschungszentrum Jülich for simulations and databases. G-Node (German Neuroinformatics Node), the Bernstein Facility for Data Technology, connects the Bernstein Network to the International Neuroinformatics Coordinating Facility (INCF). The Bernstein Coordination Site centrally manages and coordinates the network's activities. Their central public relation activities increase the national and international visibility of the network, addressing different scientific and non-scientific audiences.

Sites to visit on the web

www.bernstein-conference.de | [#BernsteinConference](https://twitter.com/BernsteinConference)