

Concluding Event of the Human Brain Project

Pioneering digital brain research

12-13 September 2023 | Forschungszentrum Jülich, Germany

Scientific Symposium | lab tours | exhibition | reception

Day 1 | 12 September 2023 | Lecture Hall (building 04.7)

From 12:00 Doors open – welcome coffee

13:00 - 14:00 Welcome addresses

Dr. Peter Jansens, member of the Board of Directors, Forschungszentrum Jülich
Dr. Gustav Kalbe, Acting Director of DG Connect C "Digital Excellence and Science Infrastructure"
Prof. Gitte Knudsen, Chair of the HBP Science and Technology Advisory Board, University of Copenhagen
Dietmar Nietan, Member of the German Bundestag and Treasurer of the Social Democratic Party of Germany
Prof. Andrè Syrota, Chair of the HBP Stakeholder Board and of the EBRAINS AISBL Board of Directors, INSERM

14:00 – 15:30 Spotlights on scientific achievements of the Human Brain Project

Pioneering digital neuroscience and brain medicine

Prof. Katrin Amunts, Institute for Neuroscience and Medicine, Forschungszentrum Jülich

From neuro-inspired to neuro-derived technologies

Prof. Rainer Goebel, Maastricht University

Building digital infrastructures for brain research

Prof. Thomas Lippert, Jülich Supercomputing Centre, Forschungszentrum Jülich

15:30 – 16:15 Coffee Break and group photo

16:15 – 17:30 Spotlights on scientific achievements of the Human Brain Project - flash talks by early career researchers

Session chair and introduction - Prof. Petra Ritter, Charité - Universitätsmedizin Berlin

Flexible silicon for neuron emulation and efficient computation Sebastian Billaudelle, Heidelberg University, Germany

NEST Desktop

Jens Bruchertseifert, Trier University, Germany

From ionic channels to global brain dynamics and behaviour: data-driven simulations of cholinergic innervation Leonardo Dalla Porta, August Pi i Sunyer Biomedical Research Institute, Spain

Showcase 1 - the virtual aging brain: structure-function relationship and cognitive decline Jan Fousek, Aix-Marseille University, France

EBRAINS Data & Knowledge services: SHARE and FIND data Archana Golla, University of Oslo, Norway

Exploring the diversity of cortical wave activity with a unifying workflow approach Robin Gutzen, Forschungszentrum Jülich, Germany

Differential predictability of cognitive profiles from brain structure in older males and females Camilla Krämer, Heinrich Heine University Düsseldorf, Germany

Towards an EBRAINS service for brain wave analysis: Cobrawap Cosimo Lupo, INFN, Italy

HPC deployment of the official EBRAINS software releases Eleni Mathioulaki, Athena Research Center, Greece

Leveraging learning to learn for intelligent parameter space exploration on HPC using GPUs for The Virtual Brain Michiel van der Vlag, Forschungszentrum Jülich, Germany

From 18:00 Reception with exhibition

Day 2 | 13 September 2023 | Research Institutes and Seecasino

09:30 – 10:00 Welcome Coffee at Seecasino

10:00 – 12:30 Hands on sessions and guided tours

09:30-10:00	Welcome Coffee Seecasino (pick up by guides)					
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	JSC, building 16.3, 16.4	INM-1, building 15.9v, 15.9	GRS seminar room, building 16.15, room: 2009, capcity: 20	JSC, Rotunde, building 16.4, capacity: 20+	INM-7, building 14.6y, room 2033; capacity: 16	INM Seminar room, building 15.9v, room 4001b, capacity: 20+
10:00-10:30		INM-1 wetlab tour 60	Macroscopic and		BrainScaleS	
10:30-11:00	JSC tour 60 min	min	topographical anatomy of the human brain (90 min)	NEST Desktop (75 min)	neuromorphic computing hands-on (90 min)	Handling EBRAINS data (90 min)
11:00-11:30						
11:30-12:00						The siibra toolsuite for
12:00-12:30	Quantum Computer tour	INM-1 wetlab tour 60	NEUROCONNECT (75 min)	Modular Science/ Multi scale session (90 min)		working with multilevel
12:30-13:00	60 min	min	·	, , ,		brain atlases (90 min)
13:00-13:30	Light Lunch and Farewell Seecasino					
13:30-14:00						

12:30 – 13:30 Light Lunch at Seecasino