



## EBRAINS Research Infrastructure symposium: addressing grand challenges in brain research

### FENS Satellite meeting - program

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**08:30 Get-together:** Coffee and mingling

**09:00 INTRODUCTION**

- **Philippe Vernier, Joliot Institute, Saclay, France:** Welcom to the Satellite & structure of the meeting
- **Pawel Swieboda, CEO of EBRAINS AISBL, Bruxelles :** An introduction to EBRAINS and challenges ahead.

**09:20 SESSION 1: WHY?** Sessions motivating the need for integrating multiscale, multilevel data in a new data infrastructure with tools allowing researchers to use these data. **Chair: Viktor Jirsa**

- 09:20-09:40 Perspective 1: Grand challenges in neuroscience – need for solutions  
**Stanislas Dehaene (Neurospin, Saclay, France)** Challenges in cognitive neuroscience
- 09:40-10:00 Perspective 2: Grand challenges in basic neuroscience, need for integration  
**Rosa Cossart, Institut de NeuroBiologie de la Méditerranée, Marseille, France**
- 10:00-10:20 Panel discussion: Solutions offered through neuroinformatics and EBRAINS

10:20-10:30 Discussion time / reserve

10:30 Coffee & posters, EBRAINS Demos (classrooms)

**11:00 SESSION 2: WHAT?** The solutions implemented in EBRAINS. **Chair : Steven Vermeulen**

- 11:00-11:20 Presentation 1: EBRAINS outline + SHARE & FIND data + examples: **Jan Bjaalie, Institute for Basic Medical science, University of Oslo, Norway and EBRAINS**
- 11:20-11:40 Presentation 2: USE data – the TOOLS + examples + examples:

- 11:40-12:00 Presentation 3: Models and simulation--- **Edigio d'Angelo, Brain Connectivity Center (IRCCS C. Mondino, Pavia) - Dept of Brain and Behavioral Sciences, University of Pavia, Pavia – Italy**

**12:30 LUNCH & posters, EBRAINS Demos (classrooms)**

**13:30 SESSION 3: HOW? Success stories** from experimentalists, clinicians, modelers: neuroscience research examples empowered by EBRAINS (published research that has made use of EBRAINS services) - Chair

- 13:30-14:00 Keynote : ...
- 14:00-14:15 Use case 1: Basic research in animal models (share and use data)
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- 14:15-14:30 Use case 2: Basic research in human subjects (share and use data)
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- 14:30-15:00 Use case 3: Modelling and simulation (from data to models to new hypotheses)
  - Multiscale dynamical characterization of cortical brain states: integrating experimental and computational research from EBRAINS : **Mavi Sanchez-Vives (Clinic Barcelona, Barcelona, Spain), Alain Destexhe (NeuroSPI, Paris Saclay, France), (Center for Brain Research, Pompeu Fabra UNiversity, Barcelonan, Spain)**
- 15:00-15:15 Use case 4: Clinical research (from data to customized treatment)
  - **Victor Jirsa, Institut de Neurosciences des Systèmes, Marseille, France**

15:15 Coffee & posters, EBRAINS Demos (classrooms)

**15:45 SESSION 4: WHERE? Perspectives and how to move forward (motivation, part II). Chair**

- 15:45-16:05 The funders: better investments, need for FAIR sharing, **Elena Hoffert, French Ministry of higher Education and Research, Paris, France**
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- 16:05-16:45 The publishers: requirements for full sharing of data, code, tools:
  - **Nature Scientific Data**
  - **Frontiers**

17:00 Coffee & posters, EBRAINS Demos (classrooms)

**17:30 ROUND TABLE** and summary of the satellite – **Chair: Philippe Vernier, Frédéric Joliot Institute for Life Science, CEA, Gif-Sur-Yvette, France and EBRAINS-France.**

Jan Bjaalie (**University of Oslo, NorwayEBRAINS**), Steven Vermeulen (EBRAINS AISBL), France  
Nivelle (EBRAINS AISBL), Petra Ritter (Charité, Universitätsmedizin Berlin, Germany)

<https://forum.fens.org/event/ebrains-research-infrastructure-symposium-addressing-grand-challenges-in-brain-research-0830-1730/>

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