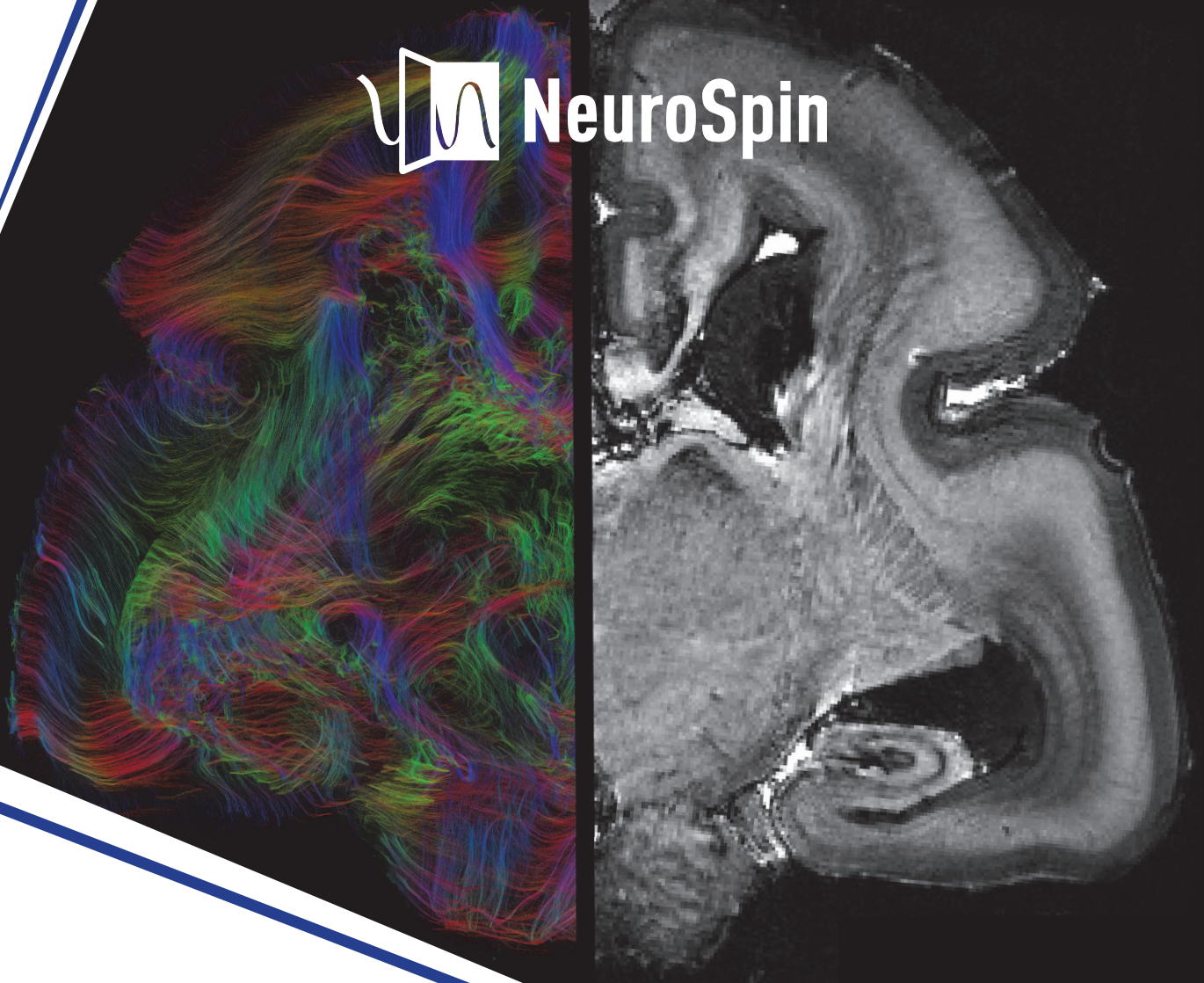


# NeuroSpin



NeuroSpin invites you  
to a one-day review of  
**“Past, present and future of brain imaging”**

**Wednesday, April 5<sup>th</sup>, 2023**  
**NeuroSpin amphitheater, CEA Saclay campus**

This meeting is open to all, please simply register until March 29<sup>th</sup>, 2023 via:  
<https://www.eventbrite.fr/e/billets-past-present-and-future-of-brain-imaging-523418768627>

# Scientific meeting

## Past, present and future of brain imaging

**8:30 Coffee and croissants**

### **9:00 OPENING**

└ **Stanislas Dehaene:**

Welcome words and introduction to NeuroSpin

### **9:10 SESSION 1**

#### **ADVANCES IN MAGNETIC RESONANCE IMAGING**

└ **Kamil Ugurbil**, University of Minnesota Medical School:

Imaging the human brain at magnetic fields greater than 10 Tesla

└ **Jürgen Hennig**, University Medical Center Freiburg:

Quantitative MRI: Back to the Future?

Two short presentations by NeuroSpin scientists:

└ **Alexis Thual**, with Stanislas Dehaene:

FUGW, a new tool to optimally align brains

└ **Jean-François Mangin**:

Explorations of cortical folds

**11:00 Pause**

### **11:20 SESSION 2**

#### **USING FMRI TO ANALYZE SPECIFIC BRAIN CIRCUITS**

└ **Rainer Goebel**, University of Maastricht:

Mesoscopic fMRI of visual perception using VASO at 7 Tesla

└ **Wim Vanduffel**, KU Leuven:

The mesoscale Primate Cortex

Two short presentations by NeuroSpin scientists:

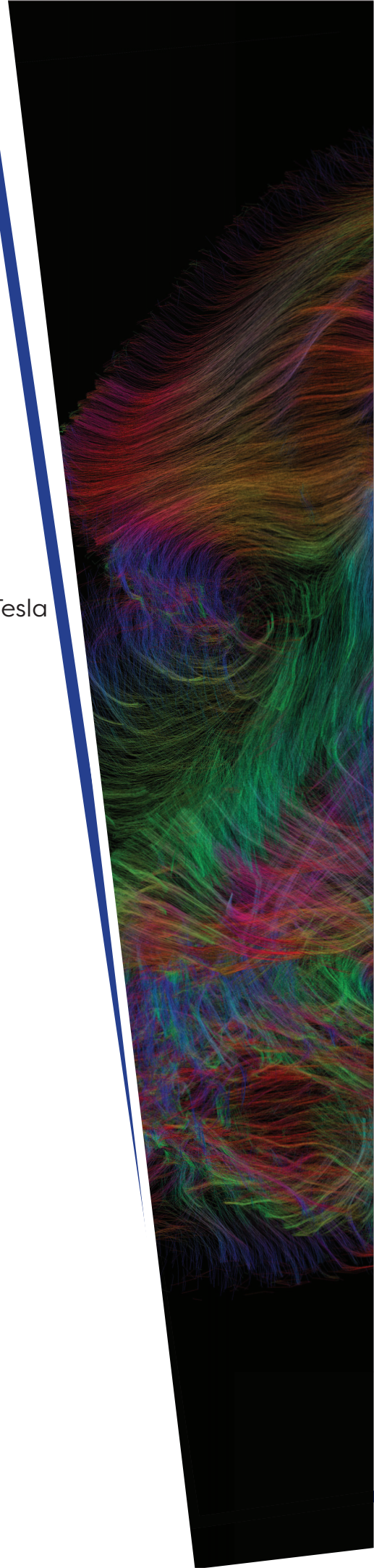
└ **Minye Zhan**:

Dissecting the reading circuit in the bilingual brain

└ **Florent Meyniel**:

Brain imaging of human probabilistic inference

**13:15 Lunch**





# Scientific meeting

## Past, present and future of brain imaging

### 14:30 SESSION 3

#### FROM FUNDAMENTAL NEUROSCIENCE TO APPLIED PSYCHIATRY

└ **Muming Pu**, Institute of Neuroscience:  
Non-human Primate Models of Brain Disorders

Four short presentations by NeuroSpin scientists:

└ **Ophélie Foubet & Maelig Chauvel**:  
Comparing fiber organization and cortical folding across great apes and humans

└ **Ivy Uszynski**:  
The Chenonceau brain atlas, a 100 micron view of human anatomy and connectivity

└ **Edouard Duchesnay**:  
Machine learning applied to neuroimaging: the challenging path toward precision psychiatry

└ **Charles Laïdi**:  
Cerebellum anatomy and function in psychiatric disorders

### 16:15 *Pause*

### 16:30 FINAL FIREWORKS

#### NEUROSPIN ISN'T JUST ABOUT MRI!

Three short presentations by NeuroSpin scientists:

└ **Sophie Herbst**:  
When? Temporal predictions shape brain dynamics and sensory processing

└ **Fosca Al Roumi**:  
The human brain compresses information in working memory: MEG and fMRI evidence

└ **Benoit Larrat**:  
Opening the blood-brain barrier with ultrasound

### 17:15 *End of the day*

