



# OHBM 2026 Educational Course

## Practical Multi-echo fMRI:

### Underlying principles, challenges, potential, and applications

Organizers: Daniel Handwerker, Eneko Uruñuela, Sarah Goodale

Time	Duration	Topic
Introduction & Concepts		
9:00	45 min	Dan Handwerker (+ Sarah Goodale): Introduction to multi-echo fMRI and tedana
9:50	30 min	Mélanie Garcia: Multi-echo fMRI data quality control
10:25	30 min	Javier Gonzalez-Castillo: Now that I have multi-echo data, what else can I do with it?
11:00	20 min	Discussion and Q&A: Best practices for collecting and validating multi-echo fMRI data
11:20	10 min	Break
Research & Clinical Applications		
11:30	30 min	Eric Pierre: Multi-echo fMRI in a large clinical study — insights from the Australian Epilepsy Project
12:05	30 min	Eui-Jin Jung: Enhancing predictive modeling using multi-echo fMRI in pain
12:40	60 min	Lunch break with informal Q&A for the final 20 minutes of the break
13:40	30 min	Julia Moser: Multi-echo fMRI in developmental neuroimaging
14:15	20 min	Discussion and Q&A: Advice & challenges for using multi-echo fMRI in clinical studies
Pushing Methods		
14:35	30 min	Kathryn Lamar-Bruno: Benefits and challenges of Echo Planar Time-Resolved Imaging (EPTI) for multi-echo fMRI
15:10	30 min	Nathan Spreng + Prantik Kundu: Subcortical connectivity at 3T & 7T with ME fMRI
15:45	10 min	Break
15:55	30 min	Logan Dowdle: The higher the field, the faster it falls — challenges and opportunities of multi-echo fMRI at 7T
16:30	30 min	Eneko Uruñuela: Is generative AI the next step in multi-echo fMRI denoising?
17:05	25 min	Panel Discussion and Q&A: Unmet needs, future goals and challenges

**OHBM 2026 Educational Course**  
**Practical Multi-echo fMRI:**  
**Underlying principles, challenges, potential, and applications**

**Resources**

**Information on multi-echo fMRI talks and posters at OHBM 2026 and information related to this course:** <https://github.com/mE-ICA/ohbm-2026-multiecho>

**A searchable list of OHBM 2026 abstracts both for multi-echo content and any other topic:** <https://me-ica.github.io/ohbm-2026-multiecho>

**Multi-echo fMRI book**

This is a work-in-progress that includes information on multi-echo fMRI including history, physics, acquisition recommendations, analysis methods, and examples of pipelines.  
<https://me-ica.github.io/multi-echo-data-analysis>

**tedana resources**

Tedana is both a software package and a hub for community efforts to build the multi-echo fMRI research community. There are several ways to access and contribute.

Multi-echo questions: <https://neurostars.org> with 'multi-echo' or 'tedana' tags

Recordings of multi-echo users meetings: <https://www.youtube.com/@tedana-devs>

Subscribe to the tedana newsletter: <https://groups.google.com/g/tedana-newsletter>

Informal discussion: [mattermost.brainhack.org/brainhack/channels/tedana](https://mattermost.brainhack.org/brainhack/channels/tedana)

Openly available ME fMRI datasets: <https://me-ica.github.io/open-multi-echo-data>

Form if you have open multi-echo data to list: <https://forms.gle/VjzbnjndLtdkq1Ch8>

Code: <https://github.com/ME-ICA/tedana>

