



# adgetron

## Summer School 2020

**WHEN**  
FROM JUNE 17TH  
TO JUNE 19TH 2020

**WHERE**  
IHU LIRYC  
BORDEAUX, France

**INFO**  
[gadgetron2020.sciencesconf.org](http://gadgetron2020.sciencesconf.org)

This course is aimed at both new and experienced users of Gadgetron, covering basic reconstruction as well as the latest functionalities. The topics covered intended for researchers in basic science and/or clinical research. This course will consist of tutorial lectures, coding sessions and sessions at the MRI scanner.

### Admission:

Send your application, including a CV, to

[gadgetron2020-preregistration@sciencesconf.org](mailto:gadgetron2020-preregistration@sciencesconf.org)

and fill a short survey describing your activities. The admission fee is 100 euros.

## TOPICS

- > Introduction to the Gadgetron Framework
- > Converting kspace data from different MRI vendors
- > Gadgetron installation on the MRI (GE & Siemens)
- > Cartesian, radial, spiral, multiband reconstructions
- > Python or Matlab interaction inside the Gadgetron
- > In-line reconstruction using BART or SigPy
- > Practical coding & scanner session on 1.5T
- > C++ OpenMP programming in Gadgetron
- > How to debug and optimize Gadgetron
- > Distributed reconstruction on a local & remote cloud
- > Machine learning inside Gadgetron

## LECTURERS

- > Hui Xue - NIH
- > David Hansen - Gradient S.
- > Oliver Josephs - UCL
- > Kristoffer Knudsen - Gradient S.
- > Vinai Roopchansingh - NIH.
- > John Andrew Derbyshire - NIH.
- > Aurélien Trotier - CNRS
- > Pierre Bour - LIRYC
- > Maxime Yon - LIRYC
- > Valery Ozenne - LIRYC