

Journée Julia

Report of Contributions

Contribution ID: 0

Type: **not specified**

BifurcationKit.jl

Friday, June 10, 2022 10:50 AM (50 minutes)

A Julia package to perform Bifurcation Analysis of possibly large dimensional equations by taking advantage of iterative methods, sparse formulation and specific hardwares (GPU)

Primary author: Dr VELTZ, Romain (INRIA)

Presenter: Dr VELTZ, Romain (INRIA)

Contribution ID: 1

Type: **not specified**

Julia for Geodynamics

Friday, June 10, 2022 3:20 PM (50 minutes)

Primary author: Dr DURETZ, Thibault (CNRS)

Presenter: Dr DURETZ, Thibault (CNRS)

Contribution ID: 2

Type: **not specified**

PencilArrays.jl

Friday, June 10, 2022 11:40 AM (50 minutes)

Distributed Julia arrays using the MPI protocol

Primary author: Dr POLANCO, Juan-Ignacio

Presenter: Dr POLANCO, Juan-Ignacio

Contribution ID: 3

Type: **not specified**

Julia subtyping

Friday, June 10, 2022 10:00 AM (50 minutes)

Have you ever wondered how Julia dispatches method calls? As an answer, have you been pointed to a mysterious .c file in the source tree understood by at most five people on Earth? Are you afraid of complex type annotations? If yes, do not wonder anymore. This talk will be a friendly walk-through across the rules that govern subtyping, the relation at the very core of method dispatch.

Presenter: Dr ZAPPA-NARDELLI, Francesco (Research Scientist, Meta)

Contribution ID: 4

Type: **not specified**

DFTK.jl

Friday, June 10, 2022 4:10 PM (50 minutes)

The density-functional toolkit, DFTK for short, is a library of Julia routines for playing with plane-wave density-functional theory (DFT) algorithms.

Presenter: Dr LEVITT, Antoine (INRIA)

Contribution ID: 5

Type: **not specified**

ParallelStencil.jl

Friday, June 10, 2022 2:30 PM (50 minutes)

Package for writing high-level code for parallel high-performance stencil computations that can be deployed on both GPUs and CPUs

Presenter: Dr RÄSS, Ludovic