

AION ARTIQ Introduction

A practical workshop on ARTIQ for AION

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5th February 2024

Outline

- 1 Welcome
- 2 Overview
- 3 Linux, Git and SSH

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3 Linux, Git and SSH

Goals

By the end of the week we're aiming to:

- Be very comfortable committing, pushing and pulling code from GitLab
- Know how ARTIQ treats devices, datasets and Experiments
- Understand the concept of the ARTIQ timeline and its effect on input and output events
- Use Samplers, TTL outputs and Urukuls
- Understand Fragments and their use in composable physics experiments

Format of the course

Ceci n'est pas une talk

- 5 day course from 9:30am to 5pm
- Heavily exercise-based: I won't be presenting much!
- We have a Discord server for chats throughout the day
 - Join it at `https://discord.gg/NhhG7TWPjy`
 - I'll be in one of the voice channels for most of the day
 - Please use it to chat as much as possible with other people: the more collaborative the course is, the more we'll get from it
- Group discussions every day at 10am and 4pm
 - Everyone to attend these please (on Discord)
 - Be ready to show your solutions to the exercises

Resources

Useful links

- **ARTIQ Manual**

<https://m-labs.hk/artiq/manual-beta/>
Your source of truth for most ARTIQ code questions

- **Training repository**

https://gitlab.com/aion-physics/code/artiq/artiq_training
Our simplified ARTIQ repository for this training - you'll store your code here

- **Worksheets**

https://charlesbaynham_.gitlab.io/artiq-induction
The exercises for the course (and these slides)

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Overview of the course

See `https://charlesbaynham_.gitlab.io/artiq-induction/overview.pdf`

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Git

Distributed version control

- 1 Commits
- 2 Remotes
- 3 Pushing / pulling
- 4 Merging
- 5 Branching

```
add alice poem on the index
Alice Jossset authored 6 months ago

docs/index.md +2 -1 Viewed
@@ -7,4 +7,5 @@ Here, we take a break from our
rigorous pursuit of science to appreciate the
be
7 ## Poems
8
9 * [Charles Baynham - Leisure, by W. H. Davies]
(charles.md)
10 - * [Sam Hope-Evans - Eternity, by William
Blake](sam.md)
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11 + * [Alice Jossset - Beautiful Poem](alice.md)
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