FASTER3 → Purpose of this presentation

- The purpose of FASTER23 is to acts a bridge between FASTER2 and FASTER3, enabling transparence integration of existing modules while laying the foundation for future architectural advances, ensuring backward compatibility and optimized modularity.
    - Compatible with
        - FASTER2 and FASTER3 modules
        - FASTER2 and FASTER3 data format
        - FASTER2 and FASTER3 synchronization system
    - From now until 2028

David Etasse → etasse@lpccaen.in2p3.fr

FASTER3 → What Disappears, What Remains an What's new

- ☒ faster_setup_gui
- ☒ faster_gui
- ☒ faster_daq_shell
- ☒ Ada
- ☒ Cython
- ☒ fasterv2 ubuntu package

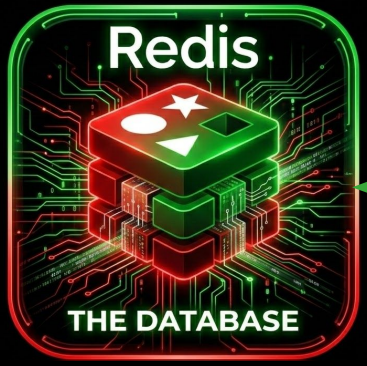
- ☑ FASTER2 Modules (uTCA and Standalone modules)
- ☑ FASTER2 Synchronisation system
- ☑ FASTER2 Data format
- ☑ FASTER2 Protocol
- ☑ fasterac and pfasterac
- ☑ RHB and nptool

```
sudo apt install faster23
sudo apt install rhb
sudo apt install fasterac
pip install pfasterac
```

FASTER3 → What Disappears, What Remains and What's new ?

faster23 setup tui

- Allow the user to configure FASTER in a terminal
- Every effort will be made to speed up the procedure



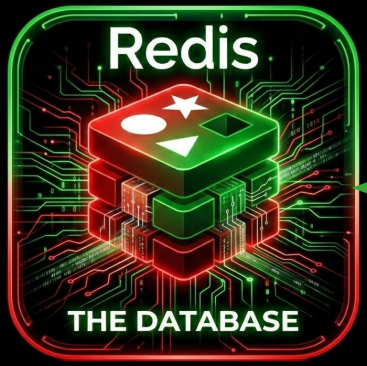
faster23 setup tui (Terminal User Interface)

- ☑ **Discover the modules**
- ☑ **Choice of algorithms** (QDC, CRRC4, TRAPEZOIDAL, ..)
- ☑ **Choice of flow traitement** (Trigger/Merger, Decimator..)
- ☑ **Choice of Storage area**
- ☒ **Scriptable**
- ☒ **Suitable for large experiments**

FASTER3 → What Disappears, What Remains and What's new ?

faster23 cli

- Command Line Interface (Lightweight, fast, automatable) for configuring FASTER
- Suitable for both large-scale and small-scale experiments



faster23 cli(Terminal User Interface)

- ☑ **Discover the modules**
- ☑ **Choice of algorithms** (QDC, CRRC4, TRAPEZOIDAL, ..)
- ☑ **Choice of flow traitement** (Trigger/Merger, Decimator..)
- ☑ **Choice of Storage area**
- ☑ **Scriptable**
- ☑ **Suitable for large experiments**

FASTER3 → What Disappears, What Remains and What's new ?

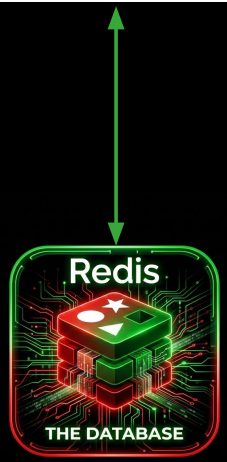
faster23 cli

- Command Line Interface (Lightweight, fast, automatable) for configuring FASTER
- Suitable for both large-scale and small-scale experiments

 # Add the Storage area
faster23_cli --**add-storage** /mnt/data/manip1/

 # Define the t0 module
faster23_cli --**t0-module** 192.168.1.25

 # List the configured modules
faster23_cli --**list-modules**



FASTER3 → What Disappears, What Remains and What's new ?

faster23 cli

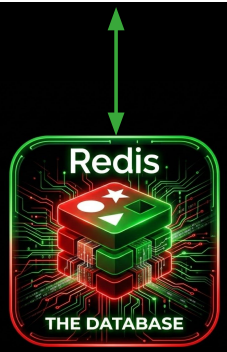
- Command Line Interface (Lightweight, fast, automatable) for configuring FASTER
- Suitable for both large-scale and small-scale experiments

 # Add the Storage area
faster23_cli --**add-storage** /mnt/data/manip1/

 # Define the t0 module
faster23_cli --**t0-module** 192.168.1.25

 # List the configured modules
faster23_cli --**list-modules**

 # Add a MOSAHR module with 8 CRRC4 channels
faster23_cli --**add-module** MOSAHR –**ip** 192.168.3.208 --**db** 1 --**type** CRRC4 --**name** C1,C2,C3,C4 --**label** 1,2,3,4 --**db** 2 --**type** CRRC4 --**label** 5,6,7,8 --**name** C5,C6,C7,C8
faster23_cli --**add-module** MOSAHR –**ip** 192.168.3.208 --**db #1** --**type** CRRC4 --**name** C#1 --**label** #1



FASTER3 → What Disappears, What Remains and What's new ?

faster23 cli

- Command Line Interface (Lightweight, fast, automatable) for configuring FASTER
- Suitable for both large-scale and small-scale experiments

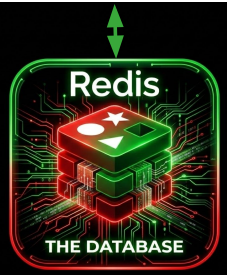
 # Add the Storage area
faster23_cli --**add-storage** /mnt/data/manip1/

 # Define the t0 module
faster23_cli --**t0-module** 192.168.1.25

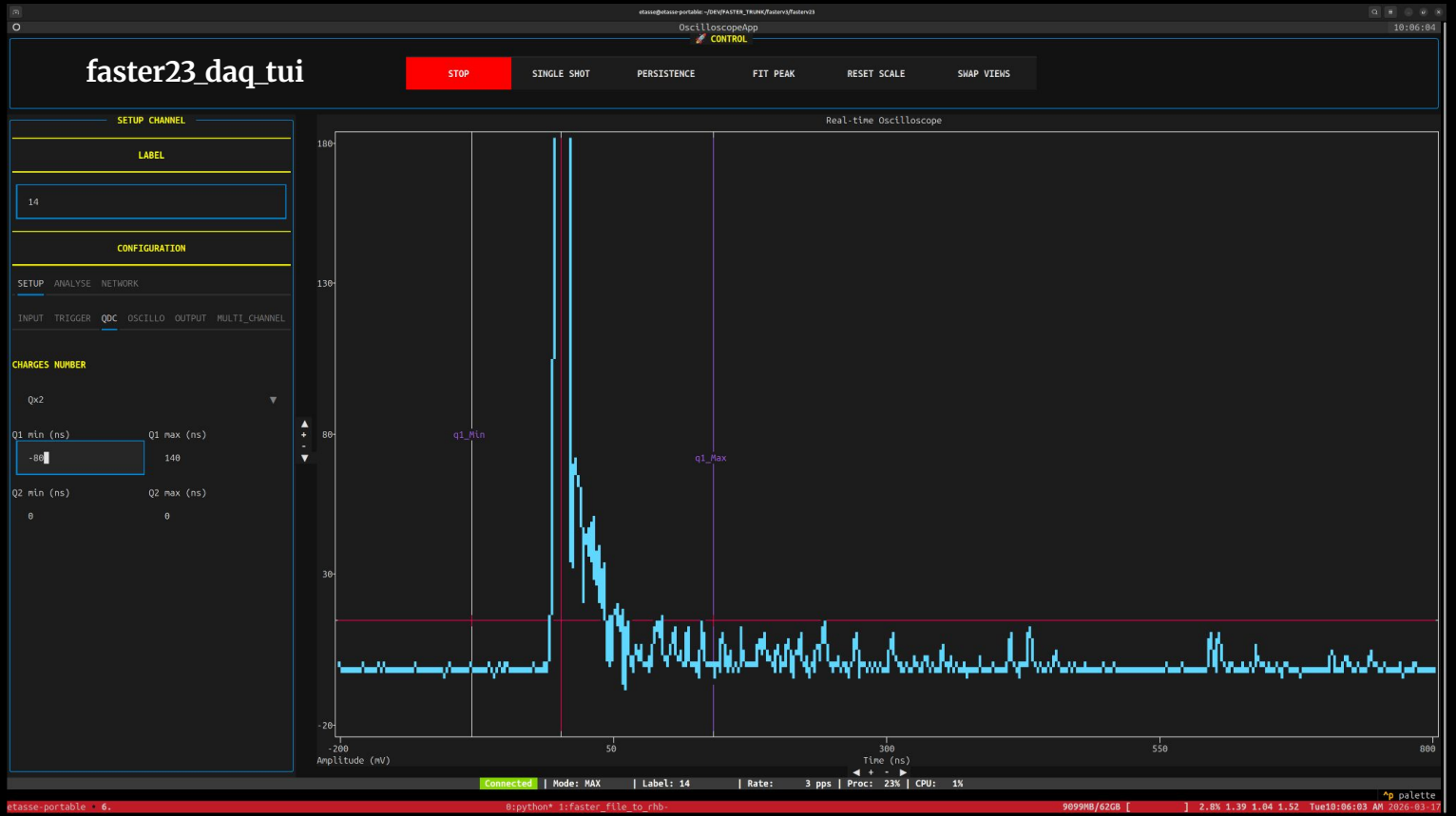
 # List the configured modules
faster23_cli --**list-modules**

 # Add a MOSAHR module with 8 CRRC4 channels
faster23_cli --**add-module** MOSAHR –**ip** 192.168.3.208 --**db** 1 --**type** CRRC4 --**name** C1,C2,C3,C4 --**label** 1,2,3,4 --**db** 2 --**type** CRRC4 --**label** 5,6,7,8 --**name** C5,C6,C7,C8
faster23_cli --**add-module** MOSAHR –**ip** 192.168.3.208 --**db #1** --**type** CRRC4 --**name** C#1 --**label** #1

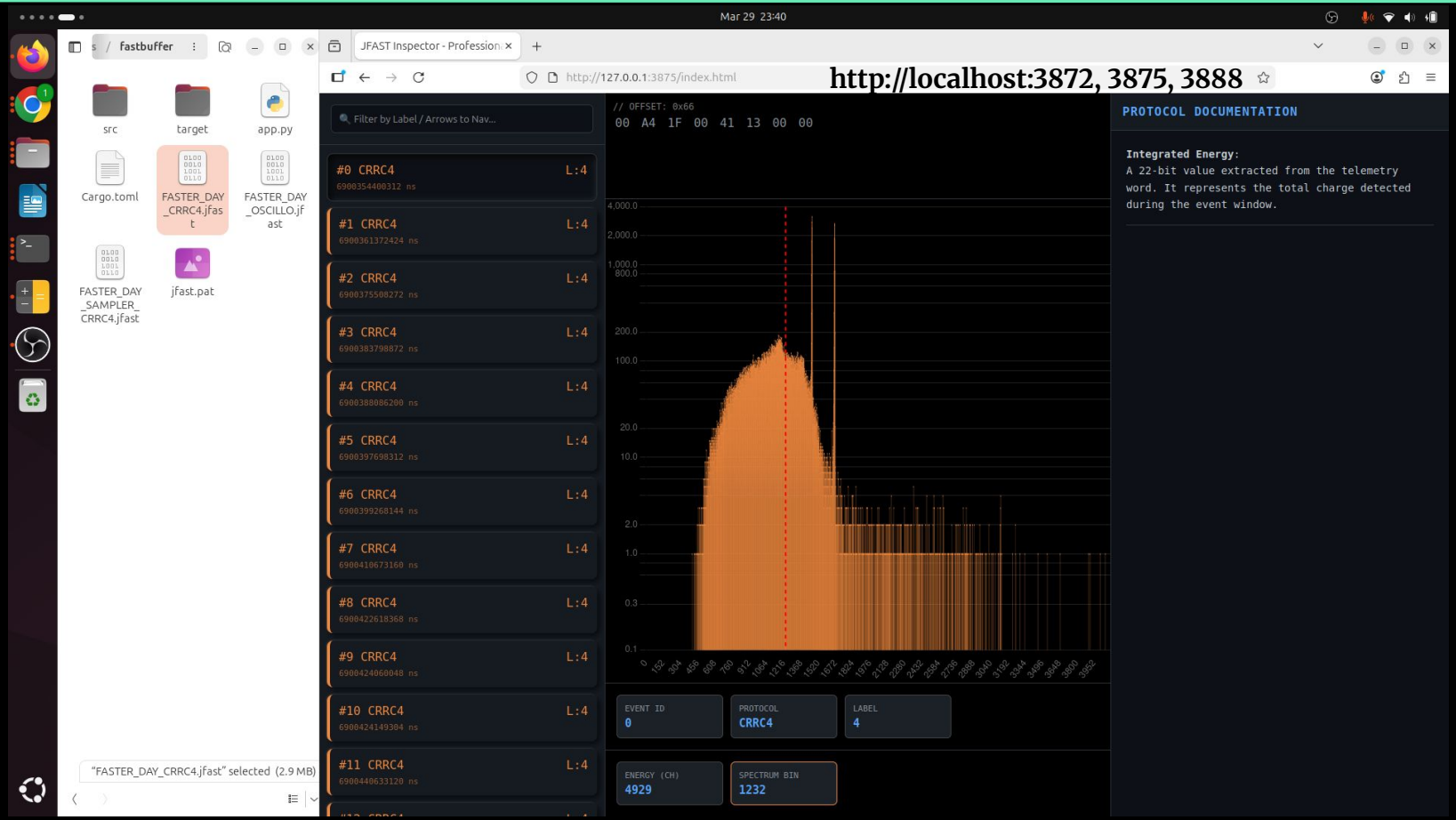
 # Add 20 MOSAHR modules with 8 CRRC4 channels from Label 1 to 21 and name C1 to C21
faster23_cli --**add-module** MOSAHR –**ip** 192.168.3.208..192.168.3.228 --**db #1** --**type** CRRC4 --**name** C#1 --**label** #1



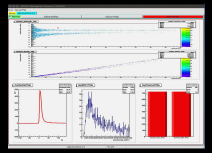
FASTER3 → What Disappears, What Remains and What's new ?



FASTER3 → What Disappears, What Remains and What's new ?



FASTER3 → FASTER23 overview

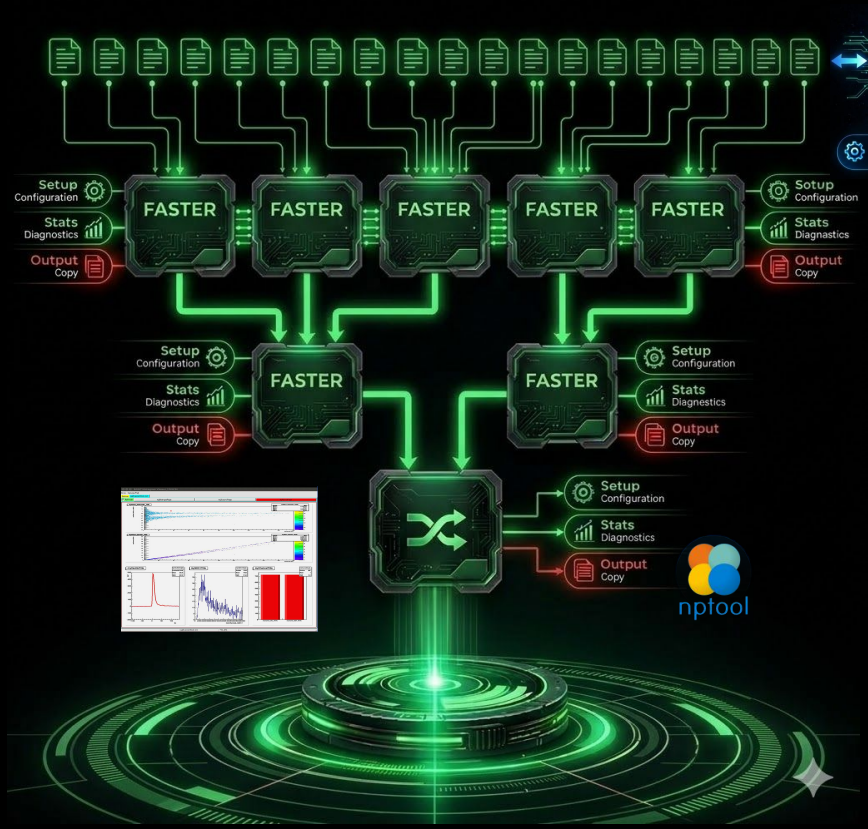


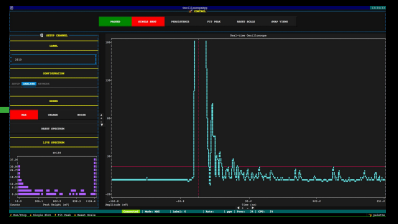
nptool

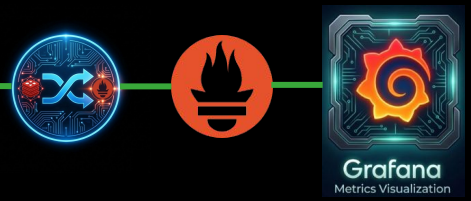
Grafana
Metrics Visualization

- ☑ faster23_setup_tui,
- ☑ faster23_cli,
- ☑ faster23_ping,
  ☑ faster23_module_list,
- ☑ faster23_daq_tui,
- ☑ fasterac, pfasterac,
- ☑ nptool, RHB,
- Graphana (option)

FASTER3 → FASTER23 overview







- ☑ faster23_setup_tui,
- ☑ faster23_cli,
- ☑ faster23_ping,
  ☑ faster23_module_list,
- ☑ faster23_daq_tui,
- ☑ fasterac, pfasterac,
- ☑ nptool, RHB,
- Graphana (option)

FASTER DAY

(2006-2008-2011-2019)

31 March 2026

- 2:00 p.m. – Session 4 → SINAPSE, the FASTER3 simulator for large-scale system

1. Project motivations (David Etasse)
2. Centralized deployment platform (Guillaume Cubero)
3. Embedded AI models (Thomas Carreau)
4. High-throughput transfer platform (David Etasse)

- 3:30 p.m. – Session 5 → Between 2 and 3 there is 23
  1. Project motivations (David Etasse)
- 3:45 p.m. – Roundtable discussion and conclusion