

Control system based on a
Highly
Abstracted and
Open
Structure



WP3 STATUS 13-05

ESCO use case: defined

- Conditioning control of LNF building 36 (Alte Energie)
- UTA control that serves Touschek Meeting Room
- The control is realized distributing BeagleBone running CHAOS connected to sensors, valves and motor unit.
- We provide a dashboard to allow a manual remote control of the UTA and the conditioning machine.
- We provide and experiment different control algorithms in order to minimize power consumption and maximize the comfort of the users.

ESCO Next Steps

- Selection and Buy of commodity HW (sensors, ADC,DAC,conditioning equipment interfaces) for fast prototyping → end of May
- Bring Ethernet in the UTA room →end of May
- Install BeagleBones + sensors/actuators → mid June
- Start playing →end June
- Remote Control dashboard→end September
- Remote Control alghorithms →end October

Accelerator use case: definition ongoing

- Control of the magnets that drive the beam to the BTF HALL.
- DAQ system (or portion of that) of the BTF under !CHAOS.

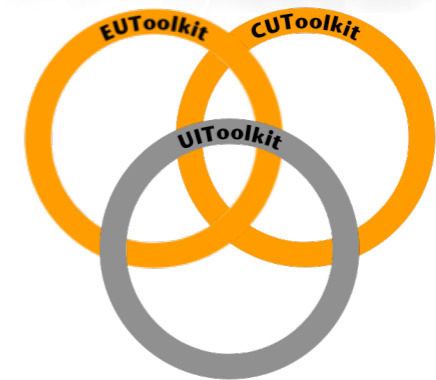
- Still to define the HW and platform that we want to use for the DAQ system

ACCELERATOR NEXT STEPS

- We have scheduled a RUN of !CHAOS from 9/06 to 13/06 to test the control of the beam.
- Define the DAQ requirements



!CHAOS



thanks you