

AIDA-2020 WP5:
Data acquisition tools
for beam tests

After AIDA-2020?

David Cussans, 28/April/20







#### Structure

- Described at <a href="https://aida2020.web.cern.ch/activities/wp5-data-acquisition-system-beam-tests">https://aida2020.web.cern.ch/activities/wp5-data-acquisition-system-beam-tests</a>
- Four tasks:
  - 5.2 Interface, synchronisation and control of multiple-detector systems (TLU)
  - 5.3 Development of central DAQ software and run control
  - 5.4 Development of data quality and slow control monitoring
  - 5.5 Event model for combined DAQ







# Deliverables

| D5.1 | Interface definition                          | M15 | 05/09/2016 |
|------|---|-----|------------|
| D5.2 | Trigger Logic Unit ready                      | M30 | 15/12/2017 |
| D5.3 | Data acquisition software                     | M30 | 06/12/2017 |
| D5.4 | Data acquisition hardware                     | M30 | 22/12/2017 |
| D5.5 | Online event data model                       | M30 | 30/11/2017 |
| D5.6 | Common DAQ system used in combined beam tests | M57 | 31/01/2020 |







## Milestones

| MS25 | Definition of detector interface standards with common DAQ | M15 | 15/08/2016 |
|------|--|-----|------------|
| MS43 | Trigger logic unit (TLU) design ready                      | M21 | 06/02/2017 |
| MS46 | EUDAQ interfaces to other DAQs available                   | M24 | 23/06/2017 |
| MS47 | Online event data model available                          | M24 | 09/06/2017 |
| MS62 | Development of run control ready                           | M27 | 31/07/2017 |
| MS66 | TLU hardware, firmware and software ready for tests beams  | M30 | 30/11/2017 |
| MS67 | Data quality monitoring tools ready                        | M30 | 06/11/2017 |
| MS68 | Slow control system ready                                  | M30 | 18/12/2017 |
| MS80 | Common DAQ system ready for combined test beams            | M36 | 19/04/2018 |







# **Project Status**

- Deliverables delivered
- Milestones passed

- Congratulations to all involved.
  - Alas, Champagne / other sparkling wine / etc.
     virtual







### **AIDAinnova**

- INFRAINNOV-04-2020: Innovation pilots
  - 22.5 M€:
    - 10 M€ EC contribution
    - 12.5 M€ Matching funds
- Currently scheduled to start Q1/2021
  - If funded.







### After AIDA-2020

- Gap between end of AIDA-2020 and (possible) start of AIDAinnova
- Retain maximum usefulness of tools developed
  - Produce more TLUs
  - Reduce need to "fork" EUDAQ
    - Or at least maintain some compatibility between forks



