

# ND DAQ – Data Rates

J. Hays

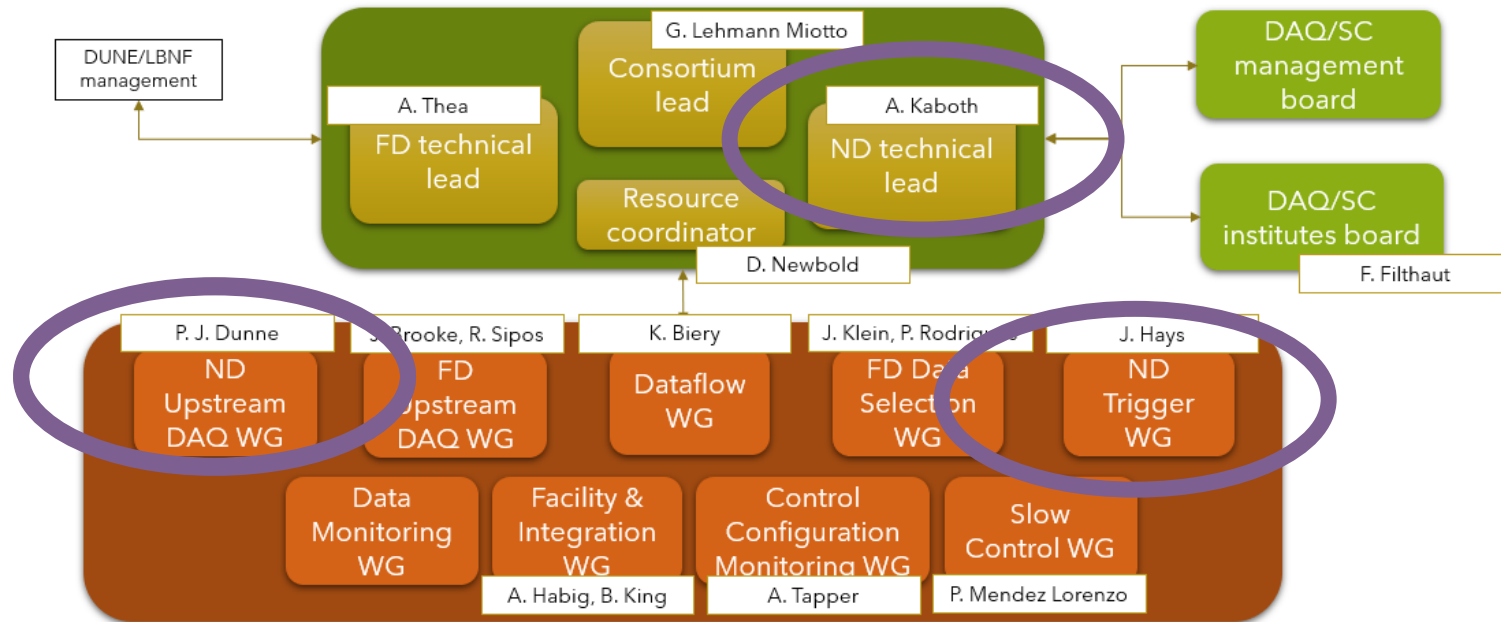
QMUL

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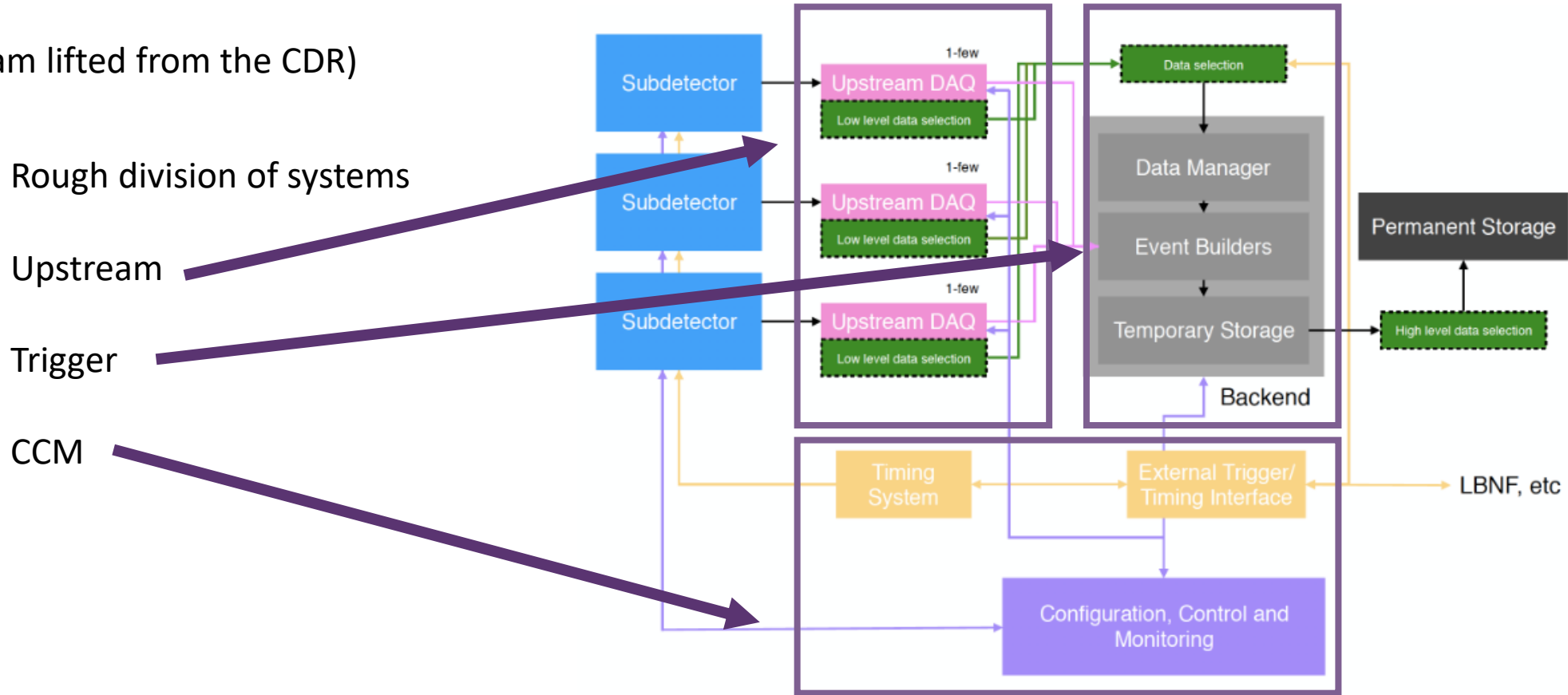
# DAQ Org Chart

Near Detector DAQ now integrated into the DAQ Consortium

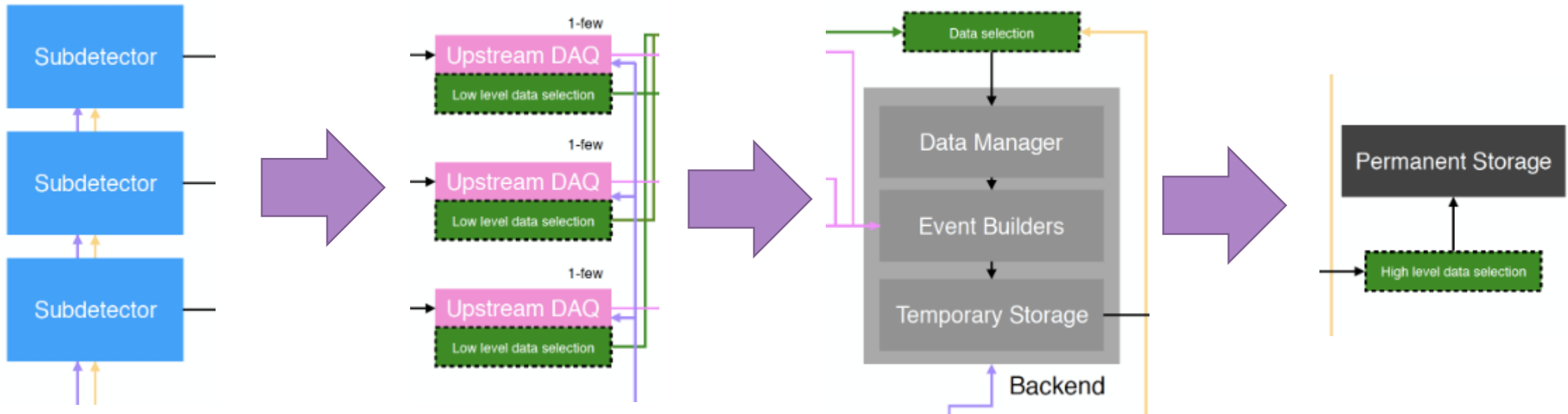
## Revised Organisation Chart



(Diagram lifted from the CDR)



# Data Rates



To move forward on the design of the DAQ need an understanding of the potential data rates between each of the sections.

# Data Rates?

## Input

Full read-out – minimal zero-suppression – maximum possible into DAQ

Zero-suppressed peak rate – likely maximum into DAQ

Zero-suppressed typical rate – likely average into DAQ

## Data Selection

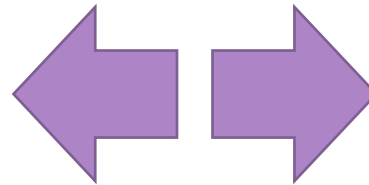
Rate into trigger / data selection step – trigger primitives or full readout

## Output

Rate to offline storage

## Data Reduction:

- zero suppression
- data aggregation
- time slicing
- pre-scaling
- physics triggering
- ...



Hardware requirements

Physics requirements

Beam data clearly important but also need to understand requirements around cosmics and other calibrations

What is needed to do the physics, what is needed to commission and run the detectors?

Discussions with detector groups

Computing CDR

Spreadsheet compiled by Tom Junk (I think?)

Next steps – need to refine the details to get best predictions and upper-limits and tie into physics requirements