PPE Lab Space & Infrastructure

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Edinburgh PPE Detectors, 18.05.2024

State of Play

- □ The PPE group has grown significantly:
 - more academics, RAs, students, …
 - more detector development projects, needing:
 - space
 - infrastructure
 - support
 - supplies
 - the old ways of arranging for that do not work anymore...
 - ... we need to organise more formally to do justice to the various
 - needs
 - interests
 - from academics' side I now took on the role as 'PPE lab coordinator', to:
 - manage the PPE lab space & infrastructure resources
 - collect & keep a record of current & upcoming needs & requests (still need to work on format)
 - help resolving conflicts of interest, if they arise
 - ... and if push comes to shove, make decisions

(the aim always will be to give the groups what they need to make their project a success...)

What we have...

- □ Lab space we have:
 - 'photon detector labs': 5201, 5207, 5207a (1304 rather a teaching lab)
 - 'services lab': 2904
 - 'cryo lab': 5203b
 - 'clean rooms': 5202 (ISO7 & ISO6), 5203c (ISO8), 5204 (vestibule)
 - ... we want & need more, but no scope for further acquisitions in JCMB...
 (we will have to fight for what we have)
- Current & future lab developments:
 - 05/2024: gas supply system installation in 5201
 - ?? 08-10/2024 ??: 5201 refurbishment if College lifts spending freeze...
- Benefits from recent lab developments:
 - 2021/22: 20GHz oscilloscope
 - 2022: setup of ISO7/6 rooms in 5202 & vestibule in 5204
 - 2022: gas piping installation in 5202/6203c/5203b
 - 2023: scanning microscope

- 2023: PPE lab extension to & refurbishment of 2904 Edinburgh PPE Detectors, 18.05.2024 Stephan Eisenhardt

Constraints & Additions

• Current & near future:

- 5201:
 - is not yet refurbished, we are waiting for this for a long time...
 - ... its currently a building site (for the installation of the gas supply system)
 - project delayed, due to several delivery issues, but end is in sight (end of May?)
 - after that we can clean up a bit, but it will be a poor environment...
 - ... the QE testing project is bravely holding out there...
 - School agreed to fund the refurbishment in 08-10/2024, but College still says 'njet'
 - we try all levers to get this resolved, but are at College's mercy...
 - ... when this starts the QE test setup will have to decant (likely to 5207a)
- 5207:
 - Button needs more space (final quarter of room) for photon detector production, now...
 - ... LAPPD project will move out, to temporary space in 5203b, until it can move to 5201
- 5202:
 - TCT system ordered & to be accommodated, from ~July
 - SiPM scanning gets a table allocated, from now
- 5203c:
 - mass spectrometer project gets allocated a table, from now
- 5201: after refurbishment
 - LHCb Upgrade needs space for 'column dressing' project

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What you need to do...

Let me know:

- your upcoming plans/needs for use of lab space:
 - needed area (m², tables or ...)
 - needed environment/facilities (air quality, illumination, ionising or laser sources, gas or other regular supplies, bandwidth of oscilloscope(s) needed...)
 - expected timeline(s) of project (likely start/end, ramp-up, -down)
 - access pattern, requirement for access restrictions, ...
- your ideas/suggestions for future investment into T&M kit:

(it is sooo important to have multiple investment options in the back pocket, low to high value... – to seize financial opportunities when they arise...)

- example make & model
- key specs to meet, desirable specs to have
- best come with a quotation, and information why you have selected this to quote
- for 'consumables' (cost <10k incl. VAT) one quotation is sufficient
- for 'equipment' (10k < cost < 50k, incl VAT) we need 3 quotations
 - if you can't get 3 quotes, we need s 'single supplier justification' (talk to me...)
- for equipment >50k we need to tender

- this is a significant endeavour... - we need to go via UoE Procurements and work hard... Edinburgh PPE Detectors, 18.05.2024 Stephan Eisenhardt 5

