

Closing remarks

Some news/reminders

- We have a broad and exciting programme (>20 experiment in operation construction or being planned). This also implies:
 - a **substantial call on** the **workshop** the **LSDC** and on **technical and engineering staff** → ensure projects include funding for effort and facilities needed. If you have a project join the operation meeting.
 - We also remain very constrained when it comes to lab-space
- We have been successful **applying for grants**, (overall research income has increase a lot) but we are not exploiting all opportunities.
 - Studentships: Number of PhD students has dropped a bit after a very entry high spike ~ 5 years ago. Look again at shared studentships and funding opportunities, but we also need to attract more applicants
 - Fellowships: lot of work done by Monica to improve the recruitment process for potential fellows in the department, but this needs all of us to look out for the best candidates
 - Some missed opportunities: Very few recent applications for ERC fellowships.
- **Projects for undergraduates**. Would be good to have more PP undergraduate projects next year. These are not restricted to academics!
- **National and wider environment**: Annual call for STFC/UKRI panel membership (closed for this year). L'pool involvement in recent Snowmass and P5 process. Next up: STFC programmatic review and next European strategy
- **Seminars** Active [PP seminar programme](#) ... please also note also [theory seminars](#) and dedicated [lecture series on muon physics](#).
- **PDRs** season is upon us..
- **Host major national and international meetings**: g-2, muon workshop, IOP, Itk, LHCb Upgrade, possibly NUFAC'25
- **Particle Physics Research Frontier** → few slides

WHAT IS A FRONTIER?

Liverpool 2031:

The University strategy has **Research & Impact as one pillar**

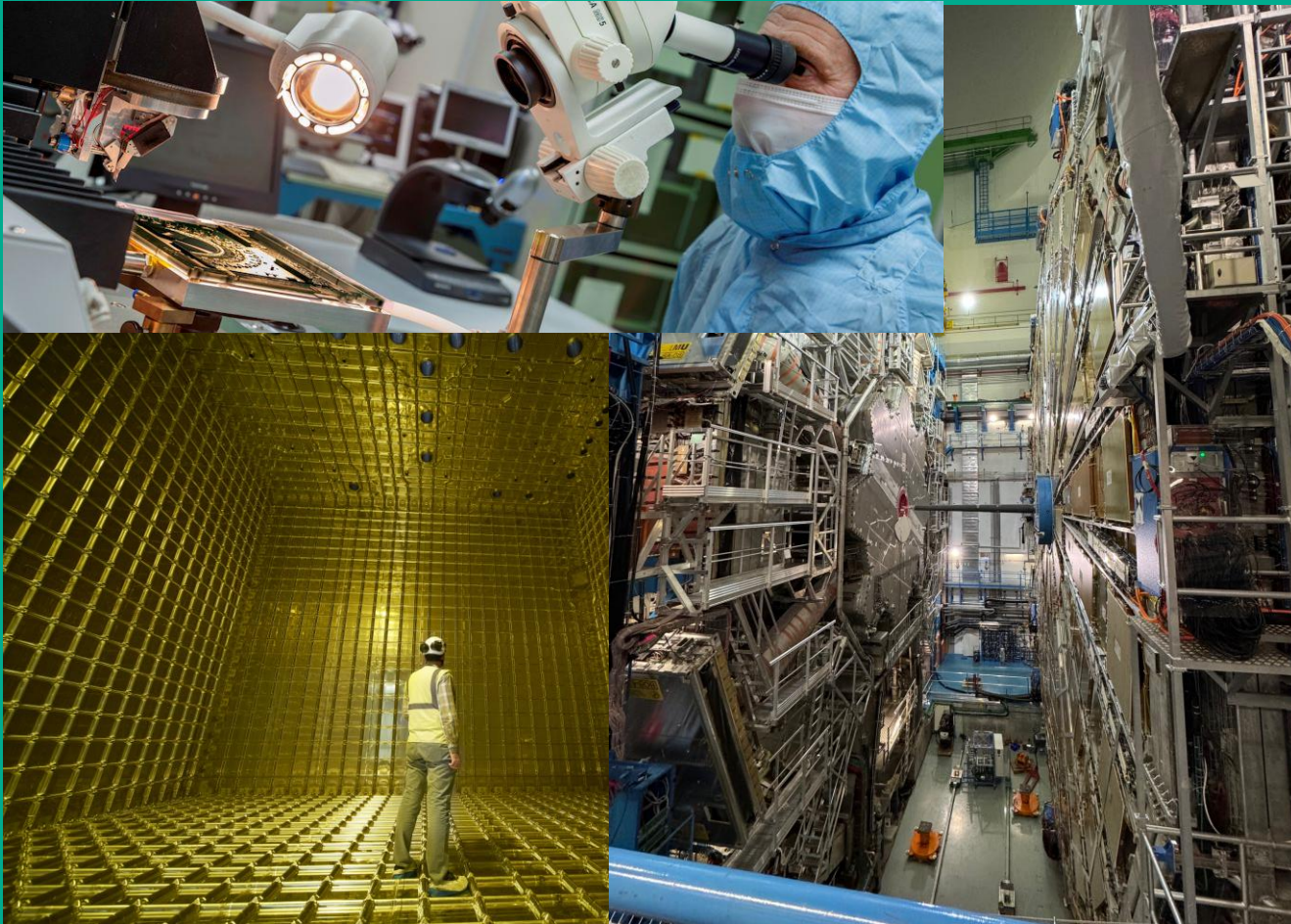
“our new **Research Frontiers** will see the University inject additional support and investment into some of our most impactful and globally-significant research. ”

- A Frontier has a USP, potential to achieve international leadership and potential to generate more income

Three Frontiers were proposed, and confirmed:

1. Materials Discovery Frontier
2. Particle Physics Frontier
3. Therapeutics Innovation Frontier

PARTICLE PHYSICS FRONTIER: UNCOVERING THE SECRETS OF THE UNIVERSE



Large PP group

Research income > £8.5M/yr

>850 publications 2018-23

29 academics and fellows

41 researchers

25 engineers/technicians/support

60 PGR students

**International leadership and
wide range of international
experiments and partners.....**

**USP: One-stop approach from
technology conception to new
science realization.**

Boulby Laboratory

Neutrinos

Liverpool

Liquid argon R&D

Silicon R&D

Computing R&D

CERN

LHC experiments

Muons

Neutrinos

Paul Scherrer Lab.

Muons

Gran Sasso

Dark matter

Neutrinos

SNOLab

Neutrinos

Brookhaven

Protons

Fermilab

Muons

Neutrinos

atom interferometry

BNL

protons

SURFLab

Dark matter

J-PARC

Neutrinos

JUNO

Neutrinos

Paranal

Dark matter



PARTICLE PHYSICS FRONTIER

Our Vision:

To enable opportunities to extend, enrich and showcase our Particle Physics research

Our Ambitions:

1. Attract national and international talent
2. Consolidate and extend our detector expertise
3. Consolidate and extend our world-leading, innovative and discovery-oriented research
4. Raise the profile of Liverpool Particle Physics

Actions Taken:

Drafted 5 year strategic plan in collaboration with the Particle Physics cluster and department

Next Steps:

Finalise and circulate plan to staff
Develop implementation plan

This may be extended to include:

- Consider UG stream / PG taught programmes
- Increase research income / Develop major grant proposals
- Impact development