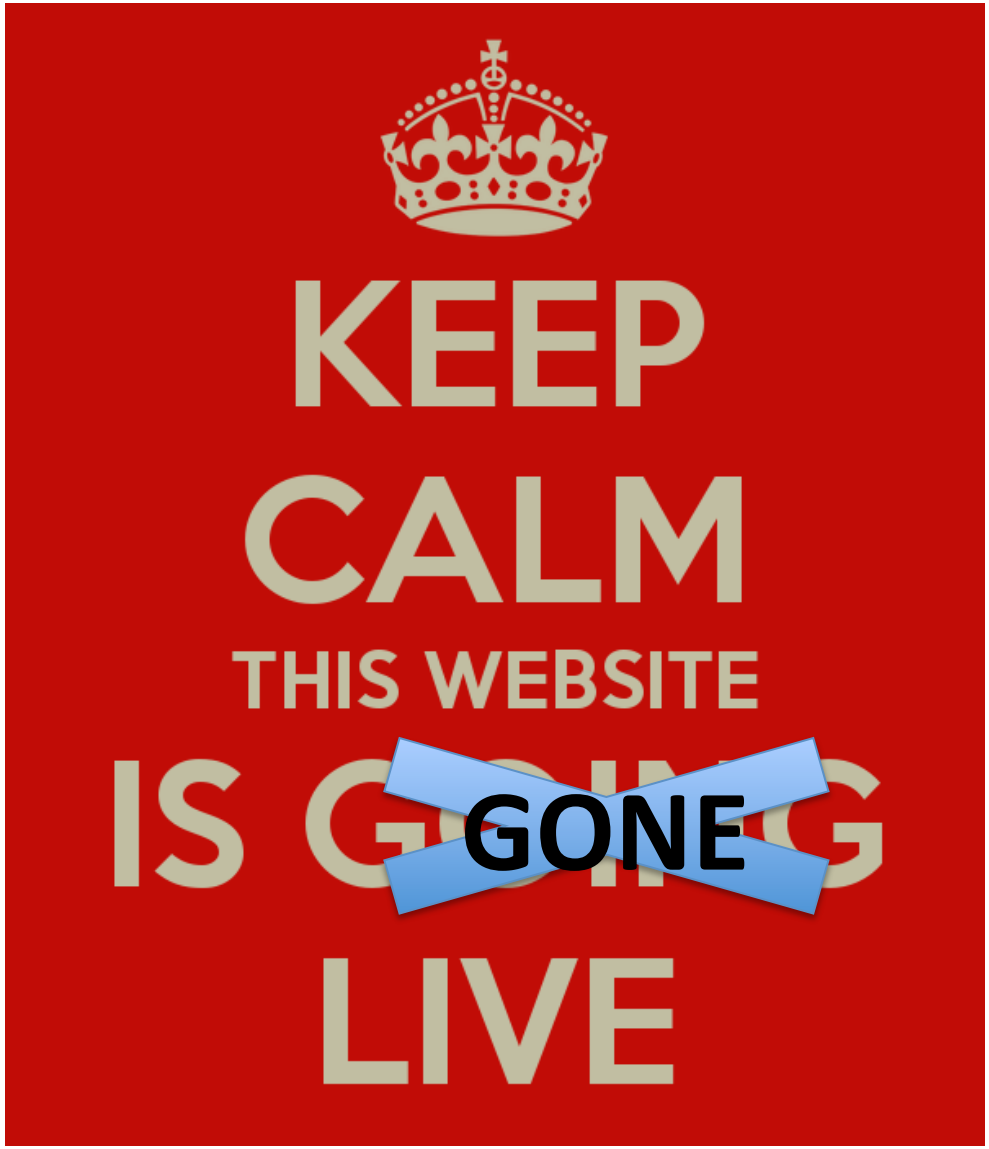
The New PPE website and all that

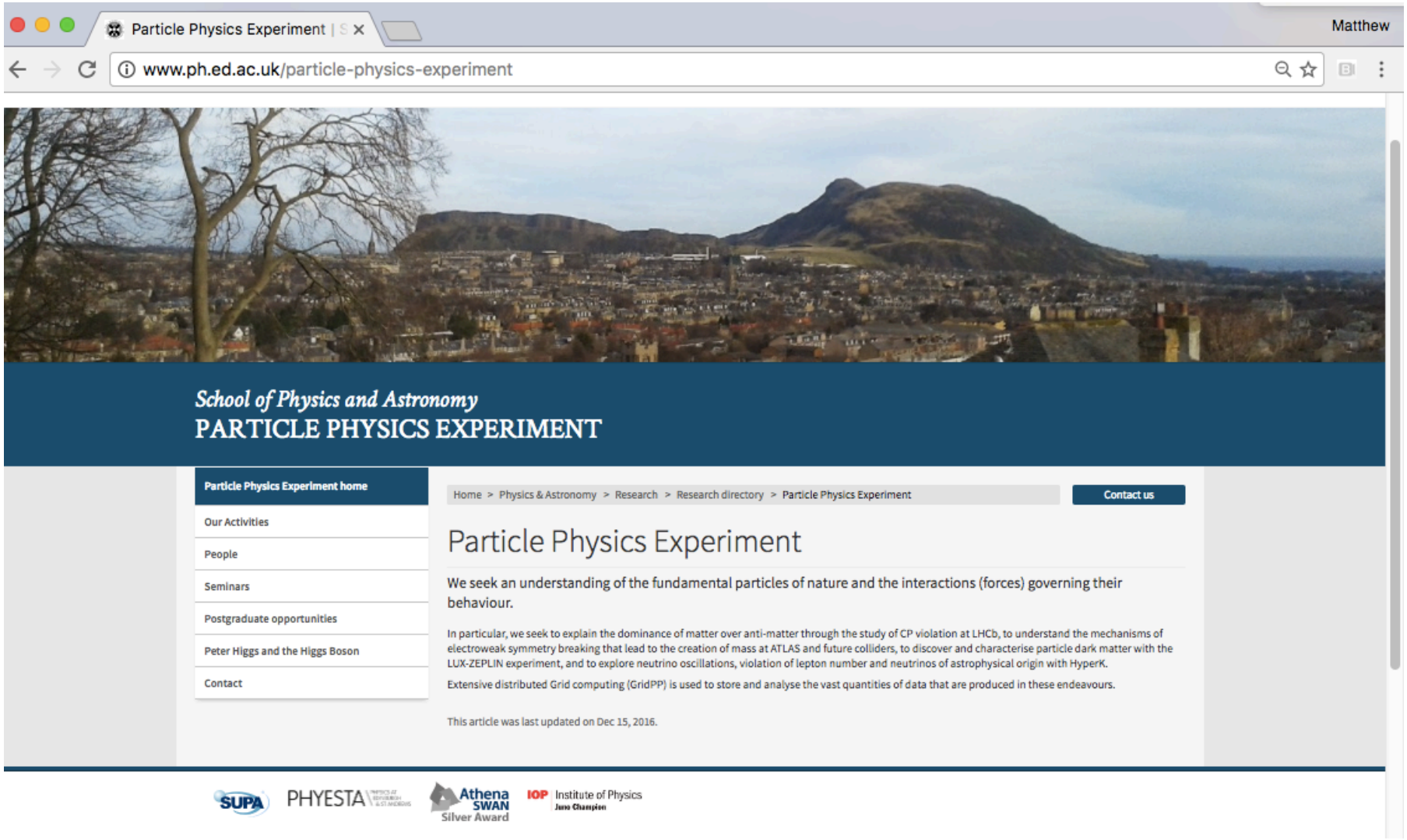
http://www.ph.ed.ac.uk/particle-physics-experiment

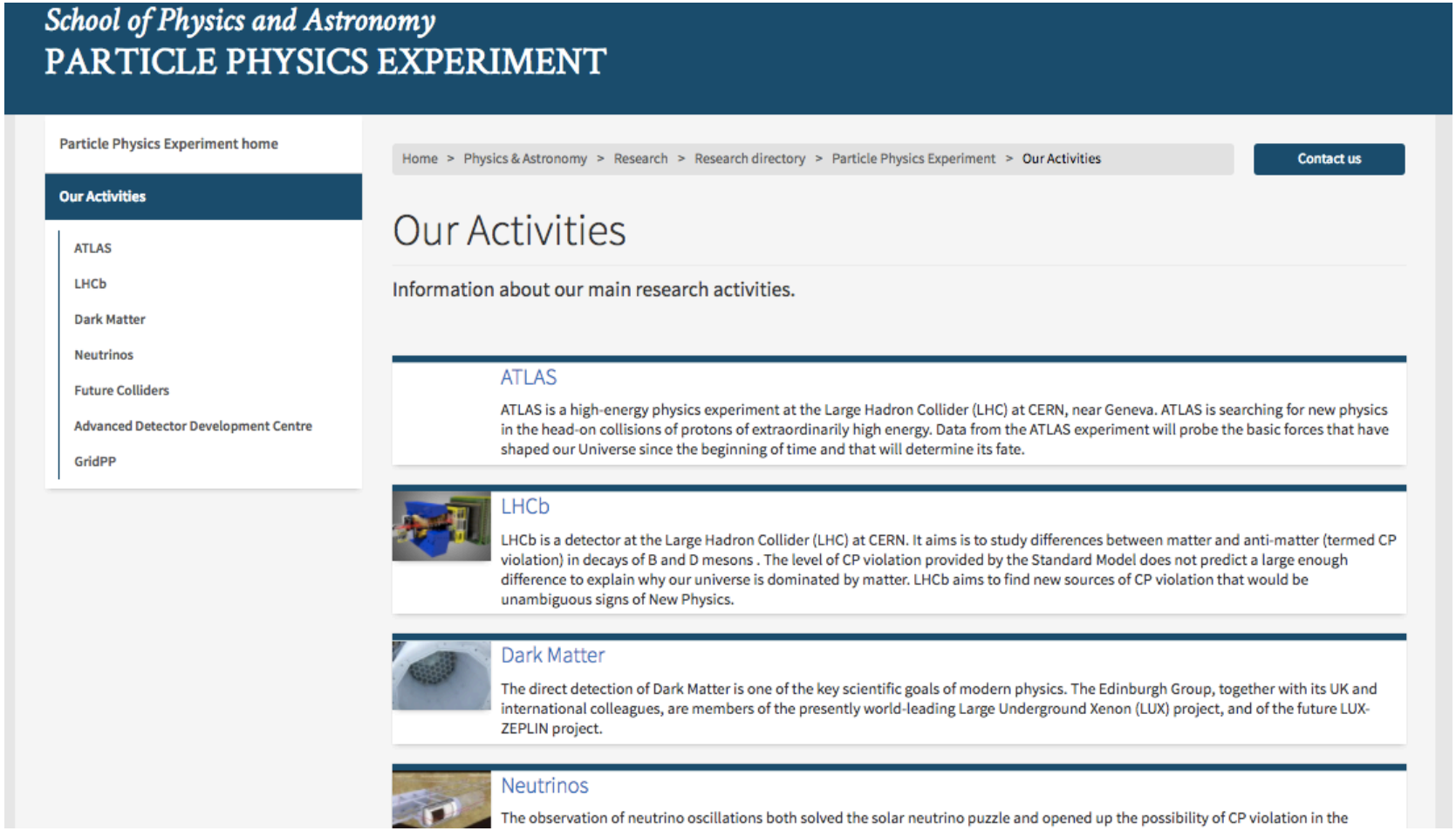


- Website increasingly part of the public image of the university/college/school/group
    - Drive to have a common look and feel that promotes the activities of the group/university
    - Attract Phd students, provide information on our activities for academic an corporate partners and stakeholders
- Common look and feel to other groups in the school
    - Aim is to minimize maintainence.
    - Pull in information from existing sources where possible
    - Highly templated approach that makes writing the pages very easy (credits D McKain)
- First iteration went live last week

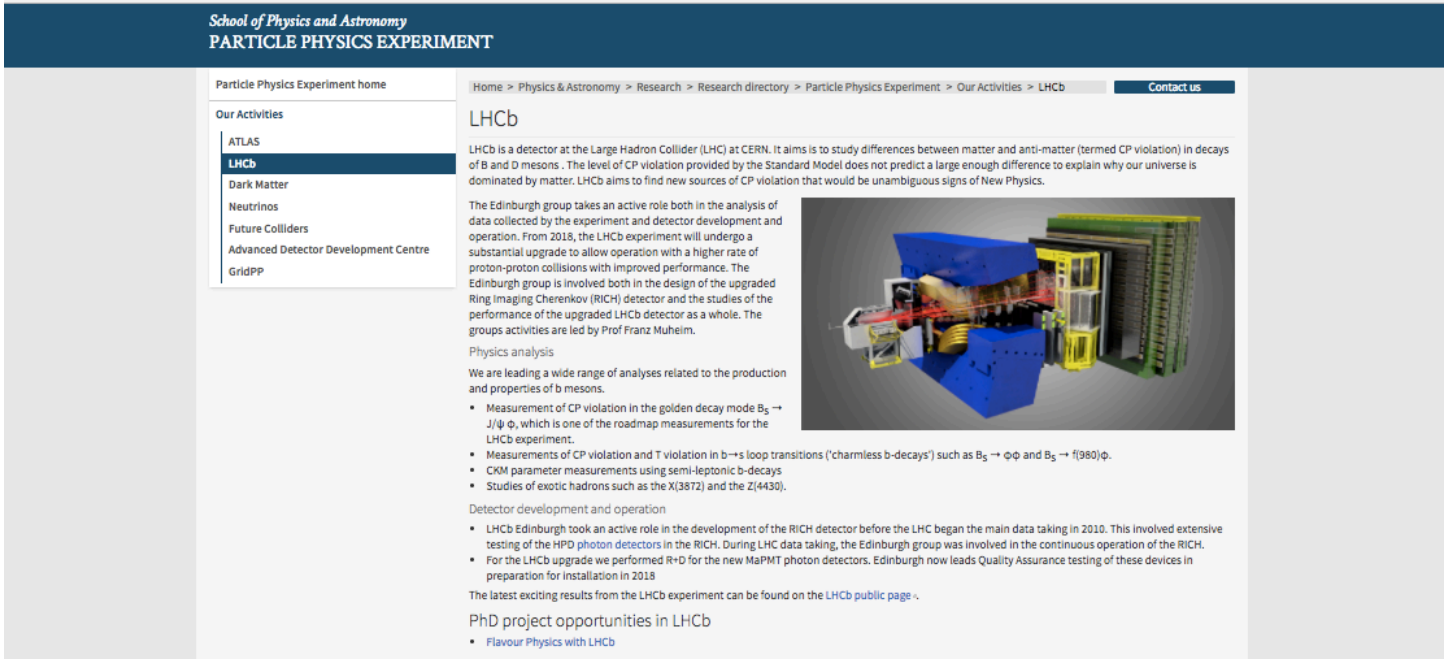
New top page, quite simple for now, idea to have some a panel layout in future

Current banner photo provided at no cost to the group by Matt





Jump off page for activities. Few photos missed (ATLAS/LC/GridPP)



School of Physics and Astronomy
PARTICLE PHYSICS EXPERIMENT

Particle Physics Experiment home

Our Activities
- ATLAS
- LHCb
- Dark Matter
- Neutrinos
- Future Colliders
- Advanced Detector Development Centre
- GridPP

Home > Physics & Astronomy > Research > Research directory > Particle Physics Experiment > Our Activities > LHCb

Contact us

LHCb

LHCb is a detector at the Large Hadron Collider (LHC) at CERN. It aims is to study differences between matter and anti-matter (termed CP violation) in decays of B and D mesons . The level of CP violation provided by the Standard Model does not predict a large enough difference to explain why our universe is dominated by matter. LHCb aims to find new sources of CP violation that would be unambiguous signs of New Physics.

The Edinburgh group takes an active role both in the analysis of data collected by the experiment and detector development and operation. From 2018, the LHCb experiment will undergo a substantial upgrade to allow operation with a higher rate of proton-proton collisions with improved performance. The Edinburgh group is involved both in the design of the upgraded Ring Imaging Cherenkov (RICH) detector and the studies of the performance of the upgraded LHCb detector as a whole. The groups activities are led by Prof Franz Muheim.

Physics analysis

We are leading a wide range of analyses related to the production and properties of b mesons.

- Measurement of CP violation in the golden decay mode $B_S \rightarrow J/\psi \Phi$, which is one of the roadmap measurements for the LHCb experiment.
- Measurements of CP violation and T violation in $b \rightarrow s$ loop transitions ('charmless b-decays') such as $B_S \rightarrow \Phi\Phi$ and $B_S \rightarrow f(980)\Phi$.
- CKM parameter measurements using semi-leptonic b-decays
- Studies of exotic hadrons such as the X(3872) and the Z(4430).

Detector development and operation

- LHCb Edinburgh took an active role in the development of the RICH detector before the LHC began the main data taking in 2010. This involved extensive testing of the HPD photon detectors in the RICH. During LHC data taking, the Edinburgh group was involved in the continuous operation of the RICH.
- For the LHCb upgrade we performed R+D for the new MaPMT photon detectors. Edinburgh now leads Quality Assurance testing of these devices in preparation for installation in 2018

The latest exciting results from the LHCb experiment can be found on the LHCb public page.

PhD project opportunities in LHCb

- Flavour Physics with LHCb

People in LHCb

Name	Position	Contact details	Location	Photo
Academic staff				
Peter Clarke	Professor	peter.clarke@ed.ac.uk 0131 650 6798	JCMB 5421	
Franz Muheim	Professor	f.muheim@ed.ac.uk 0131 650 5235	JCMB 5422	
Steve Playfer	Professor	s.m.playfer@ed.ac.uk 0131 650 5275	JCMB 5420/ 5301	
Research staff				
Laurence Carson	PDRA	l.carson@ed.ac.uk 0131 650 5857	JCMB 4311	
Greig Cowan	STFC Ernest Rutherford Fellow	g.cowan@ed.ac.uk 0131 650 7193	JCMB 5413	
Daniel Craik	PDRA	daniel.craik@ed.ac.uk 0131 650 7193	JCMB 5413	
Robert Currie	PDRA	rob.currie@ed.ac.uk 0131 651 7689	JCMB 5412	
Marcus Ebert	PDRA	marcus.ebert@ed.ac.uk 0131 651 7689	JCMB 5412	

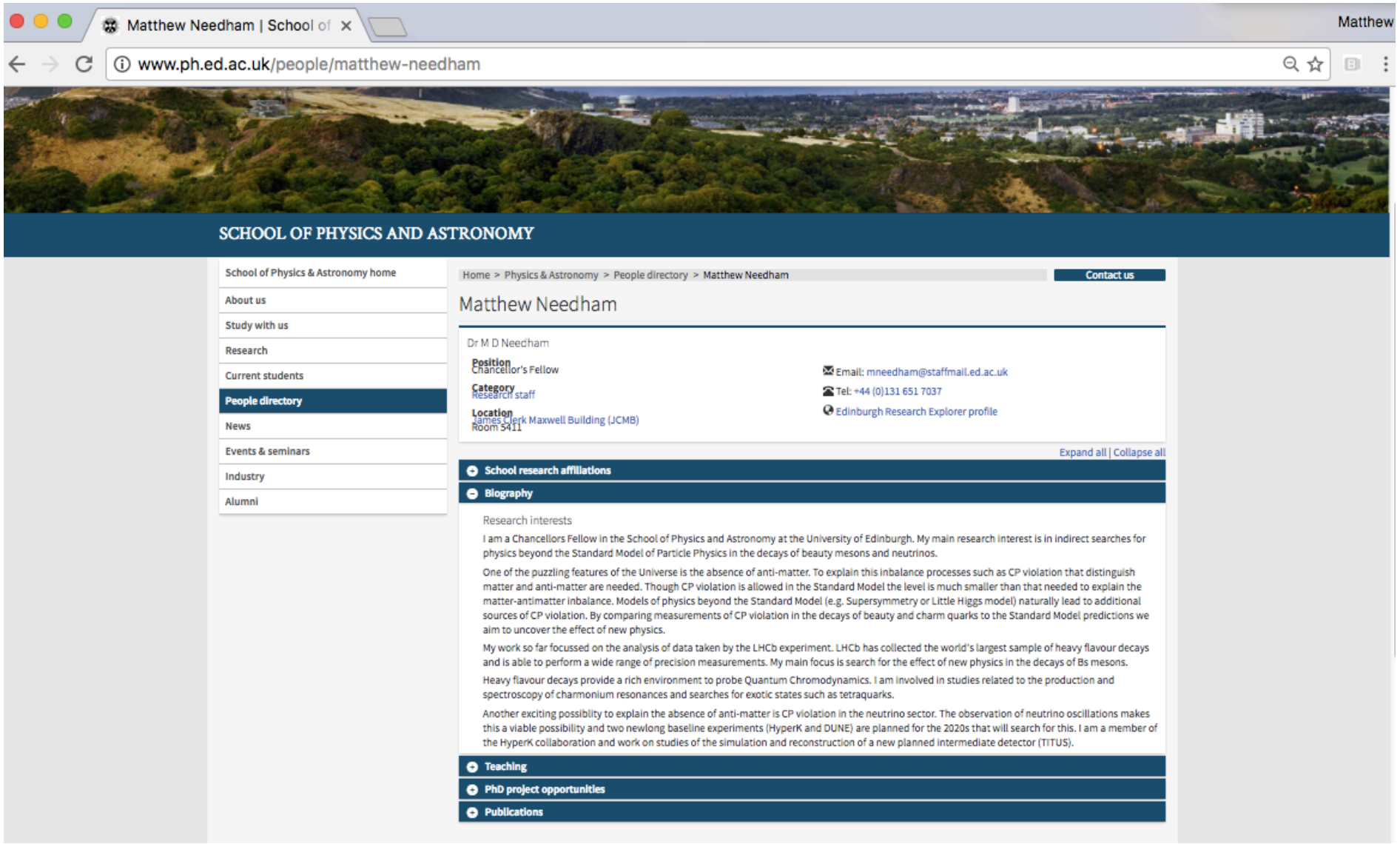
Each activity pulls in information on who is doing what from school databases

Students only sign up for what you do when you arrive (many theory students were in ‘PPE’)

Academics: Ensure Pure details are correct

A few photographs missing

Example academic info



To do:

Fill in the blanks, correct typos

New banner ?

Seminars page needs porting to new school template for this

Suggested to have a news item and a job page (will need to be maintained)

Link to old pages for backwards compatibility

Link to intranet