

# Community PP science reviews

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**Philip Burrows**

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*Oxford University*

# PPAP Terms of Reference

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**‘Draft and maintain a roadmap describing current and future research opportunities in their areas, for presentation and approval by PPAN**

**Consult and interact with the community to ensure its views are canvassed and there is an appropriate and effective route for communication with STFC on strategic programmatic issues**

**Make an independent presentation to PPAN on the relevant panel area in years in which an STFC Programmatic Review takes place, thereby providing community input to the programmatic review process**

**Respond to other specific requests from PPAN for advice as the need arises’**

# The PPAP

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**Philip Burrows (Oxford) *chair***

**Cinzia Da Via (Manchester)**

**Tim Gershon (Warwick)**

**Nigel Glover (Durham)**

**Claire Shepherd-Themistocleous (RAL) *deputy chair***

**Mark Thomson (Cambridge)**

**Dan Tovey (Sheffield)**

***Rachel Boning (STFC)***

**<http://www.hep.phy.cam.ac.uk/~thomson/ppap.html>**

# Possible Workplan I: Future Opportunities *(Walter Gear 6/3/09)*

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**based on b) understand which of a) and / or c) are the top priorities.’**

# This Meeting

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- **Review our community's PP expertise + aspirations**
- **Draw out community's views on possible future directions: 20 - 30 year horizon**
- **Opportunity to air + debate tricky issues!**
- **Start roadmap drafting process**
- **PPAN has asked for first-pass roadmap by late September (2009!)**



# Programme Committee for today

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**Nigel Glover (Durham)**

**Tim Gershon (Warwick)**

**Christine Davies (Glasgow)**

**Val Gibson (Cambridge)**

**Cristina Lazzeroni (Birmingham)**

**Steve Playfer (Edinburgh)**

**Chris Sachrajda (Southampton)**

**Maria Smizanska (Lancaster)**

**Guy Wilkinson (Oxford)**

# Programme for today

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<b>10.45 Introduction</b>	<b>– Philip Burrows</b>
<b>10.50 PPAN briefing</b>	<b>– Jordan Nash</b>
<b>11.05 Flavour-changing physics beyond SM</b>	<b>– Gino Isidori</b>
<b>11.50 CKM matrix elements and CP violation</b>	<b>– Jonas Rademacker</b>
<b>12.50 lunch</b>	
<b>13.30 Lattice QCD</b>	<b>– Jonathan Flynn</b>
<b>14.15 Rare decays</b>	<b>– Patrick Koppenburg</b>
<b>15.00 Lepton universality and flavour violation</b>	<b>– Fergus Wilson</b>
<b>15.40 tea/coffee</b>	
<b>16.00 LHC upgrades</b>	<b>– Chris Parkes</b>
<b>16.15 e+e- machines</b>	<b>– Adrian Bevan</b>
<b>16.30 NA62 + kaons at JPARC/FNAL</b>	<b>– Cristina Lazzeroni</b>
<b>16.40 COMET + muons at FNAL</b>	<b>– Yoshi Uchida</b>
<b>17.10 General discussion</b>	
<b>18.00 End</b>	

# Discussion questions for today

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1. How important will measurements of flavour-changing observables be in the post – 2014 landscape?
2. What are the connections between flavour-changing physics and (i) physics at the energy frontier and (ii) neutrino and non-accelerator physics?
3. What developments are needed from theory (including lattice QCD and phenomenology) to support and/or lead the UK experimental effort in this sector?
4. Should the UK focus its effort in flavour-changing physics on a few key observables, or aim for wider coverage?
5. How many experiments, in the flavour-changing physics sector, should the UK aim to participate in?
6. What factors should be used to determine the prioritisation of projects?
7. Are there areas of commonality between experiments (whether in the flavour-changing physics sector or otherwise) that can be exploited?
8. In which areas relating to flavour changing physics is the UK internationally leading?
9. Does the UK have the technological base to contribute to future flavour facilities?

# Housekeeping

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**1. Apologies received**

**2. Thanks to:**

**Birmingham Group**

**IoP HEPP Group**

**STFC**

**IPPP**