

# Particle Physics Advisory Panel

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# Outline

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- **Background and context**
- **Charge**
- **Immediate tasks**
- **Plans for developing a PP roadmap**

# Background

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**‘Five standing advisory panels will report to STFC’s Science Committee for Particle Physics, Astronomy and Nuclear Physics:**

**The panels will cover the areas of:**

**Particle Physics (PPAP)**

**Nuclear Physics (NPAP)**

**Particle Astrophysics (PAAP)**

**Near Universe (NUAP)**

**Far Universe (FUAP)**

**The remit of the panels will includes Theory, High Performance Computing and Data Curation issues in their respective areas.’**

# 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'**

# Terms of Reference (contd.)

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**‘Each panel will consist of a chair, deputy chair and between three and six (more in exceptional cases) additional members, one of whom will ideally be appointed from the relevant grants panel. Members will serve for two years with the possibility of reappointment.**

**STFC will support and organise one face to face meeting of each panel per year, but panel members are encouraged to self-organise additional meetings as they feel necessary.’**

# 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)***

# Standing on the shoulders ...

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**There used to be advisory panels that fulfilled similar role!**

**Particle Physics Committee**

**Particle Physics Advisory Panel**

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**Some things have changed:**

**PPARC → STFC**

**Intermediate layer: PPAN, PALS, ASTAB**



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**Some things have changed:**

**PPARC → STFC**

**Intermediate layer: PPAN, PALS (ASTAB)**

**The need for broad community engagement and distillation of sound strategic advice has not!**

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# The PPAP

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**Experiment**

**Theory**

**Flavour physics**

**Neutrino physics**

**Hadron-hadron collisions**

**Lepton collisions**

**Detector R&D**

**Accelerator R&D**

**Grants Panel**

**PPRP**

**Previous Adv. Panel**

# The PPAP

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Theory

Flavour physics

Neutrino physics

Hadron-hadron collisions

Lepton collisions

Detector R&D

Accelerator R&D

Grants Panel

PPRP

Previous Adv. Panel

**We intend to consult  
widely within our  
community  
so as to engage as  
many of us as  
possible!**

# Working Together

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**Particle physics members of PPAN**

**Grants Panel**

**IoP HEPP Group**

**PP Action Group**

**PA, NP, NU, FU Advisory Panels**

**Grant holders + principal investigators**

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**All of us!**

# What's happened so far

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**23/7/08**      **Panels announced**

*Community invited to suggest members*

**2/2/09**      **Chairs announced**

**6/3/09**      **Chairs attended PPAN Meeting**

*Panel membership finalised*

**16/3/09**      **Informal kick-off meeting (by phone)**

*Panel membership announced via HiPhi*

**6/4/09**      **First meeting**

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

# Possible Workplan I: Future Opportunities

*(Walter Gear 6/3/09)*

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- identify what facilities will be needed in order for the UK make significant contributions to these areas;**

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- identify what facilities will be needed in order for the UK make significant contributions to these areas;**
- based on b) understand which of a) and / or c) are the top priorities.’**

# Possible Workplan II: Matching Current Programme to Roadmap priorities

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- 'a) What are the science drivers for each of the activities e.g. how does x help the UK reach the identified challenge?**
  
- b) What is the UK expertise for each activity e.g. is the UK world-leading, if not, what specific activities are the UK involved in that will contribute to this?**

# Possible Workplan II: Matching Current Programme to Roadmap priorities

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- c) What are the technological needs for each activity and what is the UK expertise in such technology (both academia and industry)?**
  
- d) In a fixed budget, what are the top priorities e.g. what really must be done in order to meet the challenge?'**

# Immediate charge

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**Motivated by possible (likely?) early general election, and early next CSR:**

**First pass at PP strategy roadmap by September 2009!**

# How to Proceed

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- 1. Immediate priority is to generate a PP roadmap by September**
- 2. Flesh out details**
- 3. ‘Steady-state’ mode of operation for Panel: refining, updating roadmap**

# Some ideas – comments please

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**Hold ~3 community meetings to review status + identify physics opportunities:**



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**Energy frontier physics (pp, e+e- ...)**

**Flavour physics (B, K, mu ...)**

**Neutrino physics (L-B, beta, NuFac ...)**

**Non-accelerator physics (edm, DM ...)**

**Theory (phenom, strings, LQCD ...)**

# Some ideas – comments please

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Invite 'programme committee' for each meeting, **drawing in more community expertise**, to define:

**scope of meeting**

**topics for presentation**

**speakers**

**discussion questions / issues**

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**NO: canned talks from ‘the usual suspects’**

**YES: broad overviews, plenty of discussion**

# Some ideas – comments please

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**Vital that these meetings draw significant community participation, **not just the experts in each area!****

**Most sensible timescale: May/June**  
**Geographical spread across UK**

**Follow up (late Summer) with ‘town meetings’ to debate proto-roadmap**

# Longer term - ideas

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**Need to establish clear mode of operation and mechanisms for making input**

**Regular timetable of PPAP meetings**

**PPAP visits to groups?**

**Statements of Interest?**

**www-based surveys?**

**...**

# Please contact us!

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