

DAMOPP meeting 28th November 2006

Guthrie Room, IOP, 76 Portland Place, London.

1. QuAMP Programme Committee Meeting

The meeting of the group representatives started at 1pm.

In attendance:

*Ed Hinds (DAMOPP Chair)
Andrew Murray (DAMOPP Secretary)
Nigel Mason
Viv Kendon
June McCombie
Ortwin Hess
Jonathan Underwood
Ivan Powis
David Chambers
Claire Garland (IOP)*

Apologies: Charles Adams, Helen Margolis, Edward Armour, Mark Fromhold, Chris Mayhew, Peter van der Burgt, Ben Whitaker, Allan Boardman, Nick Braithwaite.

It was noted at the start of the meeting that QuAMP programme committee members who are not DAMOPP committee members should claim their expenses from individual groups, whereas DAMOPP committee members should claim expenses from Division funds.

The meeting started with Ed Hinds and Claire Garland (IOP) giving an overview of the work that has been carried out so far to secure a venue for the QuAMP2007 meeting.

Ed Hinds noted that the venue will (probably) be at UCL, with lectures/posters being held in the Roberts Building in rooms G06 & G08. These rooms can hold 100 and 150 people respectively. Accommodation was being considered at Warren Street Hall and Commonwealth Hall, both part of UCL and close to the Roberts building.

Ed and Claire will look at the venues prior to Christmas to ascertain their suitability.

Claire indicated that the IOP was looking to use a company called Corporate Team to secure Hotels around the area. Nigel Mason noted that there are several Hotels that are normally used by UCL for conferences which may be cheaper to secure directly. Claire will consult with Nigel to find out which hotels these are, and to establish the rates.

ACTION: Claire to talk to Nigel regarding Hotels in the area.

The conference dinner venue was then discussed. Ed Hinds noted that there is a venue near the river "The Riverside Room" which appears to be excellent. Claire noted that the IOP also has used alternatives in the past which also are very good, such as the river room at Glaziers Hall. It was also noted that some venues only charge for catering and not for booking. Venues will be investigated further by Claire and Ed Hinds before a final decision is made.

It was noted that transport to and from the Hotels etc to the dinner should not be a problem.

Ed Hinds indicated that a logo for the conference would be made from the image of a London bus bearing the QuAMP2007 name. IOP publishing (Bristol) are producing this image for approval.

Ed Hinds asked the committee to send any ideas for the conference to both himself and to Claire.

At this stage Claire left the meeting (1.20pm).

Further discussions as to QuAMP were then considered.

Ed Hinds noted that he has secured funding for QuAMP from the EPSRC for 2006, 2007 and 2008. The format for the meetings is to alternate between summer schools (as held in Durham in 2006) and full conferences (as to be held at UCL in 2007). It was noted that the budget for the 2007 meeting is £42k from the EPSRC, and that an additional £18.8k has been requested from the IOP to cover the costs for international speakers.

It was noted that all groups in DAMOPP have agreed to help fund QuAMP.

A general discussion followed as to the level of support from groups. Ed Hinds asked that each group support the conference with funds around £1k. QQQ made a commitment of £1.5k, QEP promised a minimum of £500, and PPC committed £500. It was generally thought that AMIG and MPG could raise between £500 and £1.5k for this meeting, depending on the level of activities planned for 2007. It was also noted that the IOP now does not allow a carry forward of previous years funds, and that this has resulted in funding concerns from all members.

ACTION: AMIG and MPG group representatives to give Ed Hinds a firm commitment of what funds they will commit to QuAMP2007.

Nigel Mason discussed the decisions of the IOP regarding the funding model that is to be adopted in future. He noted that student bursaries would now be issued centrally, that outreach activities would be handled by the IOP directly and that groups/divisions would be expected to submit budgets each financial year, based on a 3 year programme.

It was stated by Ed Hinds that the decision on the requested £18.8k from the IOP is to be made soon, and that it may be that DAMOPP only receives a fraction of this request.

ACTION: Ed Hinds to let the DAMOPP committee know the funding decision by IoP and its consequences for the meeting.

Programme Details for QuAMP2007.

The details of the QuAMP2007 programme were then discussed at length. Ed Hinds showed the group a suggested outline of the programme, which is to be run over 4 days. This model will have 8 sessions of 175 minutes, with time for poster sessions each day to be held over a buffet dinner. The conference dinner is to be held on the Tuesday evening, with the conference finishing either early on Thursday, or to ease the programme structure, later that day.

ACTION: Ed to send the suggested conference programme to group representatives to see the suggested structure of the programme.

Ed Hinds then asked each group representative to outline to the meeting what their views were, and to suggest names of speakers. A discussion followed from this and it was felt that the conference could not be split up into the five constituent groups because of the many overlapping interests. It was strongly felt that the conference should NOT have parallel sessions if possible. Therefore time was spent combining the various suggestions made by the group representatives to produce eight sets of suitable themes.

It was also discussed whether the conference talks should be published by the IOP, and it was noted that IOP publishing has the facilities to do this.

The issuing of poster prizes was also discussed, however there were no definite conclusions about this at the time.

It was noted by Nigel Mason that DAMOPP should approach J Phys B to ask if they will fund the costs of one of the international speakers.

ACTION: Ed to seek J Phys B funds for QuAMP2007.

2.00pm *At this point Nigel Mason left the discussions for another meeting.*

The topics discussed by the meeting were grouped into eight different sessions as shown below, to reflect possible groupings in the QuAMP2007 programme.

- 1) Attosecond pulses, high harmonic generation, high intensity, laser plasmas
- 2) Collisions (expt & theory), photodetachment, low-temperature technological plasmas
- 3) Spectroscopy & dynamics with Synchrotron, FEL, THz, 2D IR
- 4) Coherent control of atoms, molecules and light (including 4GLS)
- 5) Metamaterials, semiconductor BEC
- 6) Quantum metrology, atom optics, optical lattice
- 7) Ultracold molecules, few-body quantum systems, cavity cooling
- 8) Quantum information, single atoms and photons, atom and ion chips.

Each representative was asked to take this away from the meeting and to contact their groups so as to supply names of people to speak, based upon these topics. It is expected that there will be strong overlaps between the different group suggestions, allowing a subset of speakers to be invited before Christmas.

ACTION: Ed Hinds to email all group representatives with this list, and to ask for speaker suggestions within 1 week of the meeting.

Publicity.

The topic of publicising QuAMP2007 was then discussed, as well as the need to substantially support students and postdocs who attend. Ed Hinds noted that the IOP will setup a web site for this conference, and that they are handling the organization through Claire.

It was suggested that J Phys B and other related IOP journals be contacted to advertise the conference on their web pages.

The IOP will produce posters for the conference (using the red bus logo) which will be distributed to the different groups to then be sent to different research groups throughout the UK and Ireland.

It was suggested that the IOP also send a hardcopy mailing shot to all DAMOPP members to give them the details of the conference.

ACTION: Once the logo has been finalised, Andrew Murray & Ed Hinds to create the posters and letter for distribution through the different group representatives by the IOP, and to contact IOP journals to request that they advertise the meeting on their web pages.

Student Support.

It was noted that the conference hopes to support students/postdocs as much as possible with up to 100% of costs being covered by bursaries. It was agreed that this should encourage students to attend for all days. Students/postdocs with bursaries will be required to present and man posters.

The possibility of gate crashers to the conference was briefly discussed, and it was felt that this could be controlled by the UCL local committee at the time.

The meeting concluded with Ed Hinds asking all group representatives to enthuse their groups to support this conference series, which it is hoped can become one of the major UK conferences which attracts national and international participants.

2.30pm. END OF QUAMP PROGRAMME COMMITTEE MEETING.

2. Meeting of the DAMOPP committee.

The DAMOPP committee meeting was attended by all who were at the representatives meeting, with Jonathan Underwood representing QQQ interests at this meeting.

The following agenda items were discussed.

1. Minutes of last meeting & actions arising

The minutes of the last meeting were taken as read and were approved by the committee as being an accurate representation (apart from a couple of typographical errors).

No actions were noted from the previous minutes.

2. Membership of the committee.

The membership of the committee was discussed, and it was noted that people have recently stood down (Helen Margolis, Mike Charlton). Group representatives with more than one year to go are Ortwin Hess (QEP), Ivan Powis (MPG), Charles Adams (QQQ), Edward Armour (AMIG). David Chambers representing Plasma Physics will stand down in April, and stated that Nick Braithwaite would come along as an interim member until a new member could be found. It was noted that a permanent member was needed for this.

Co-opted member Andrew Murray is the new DAMOPP secretary.

The geographical balance of the committee was discussed, and it was noted that a large fraction of the committee comes from Nottingham at present. The need to have representatives from Scotland, Ireland and Wales was noted. It was agreed that long distance travel should not inhibit more distant representatives, and that meetings do not have to take place in London.

Several names were discussed to be approached as possible new co-opted members. These included:

- Silvia Bergamini (Open University)
- Ferruccio Renzoni (UCL)
- Jimena Gorfinkiel (Open University)
- Peter Barker (UCL)
- Simon Cornish. (Durham)

It was felt that a fair representation of 2 members of each group on the committee was adequate and appropriate.

ACTION: Andrew to ascertain possible names of representatives from each group and the geographical balance, so as to ensure fair representation from each group, and to send this list to existing members for comment/discussion.

ACTION: Andrew to find out if IOP can provide video conferencing facilities which can be accessed by DAMOPP, and if so to ask if members also have access to these facilities in their institutions.

3. Individual Group reports

Reports from each group were submitted as given below.

Plasma Physics

Chairman: Prof Nick Braithwaite, Open University

Treasurer/Secretary: Dr David Neely, Rutherford Appleton Laboratory

Annual Conference (incorporating the AGM):

The 34th Institute of Physics, Plasma Physics Group 2007 Conference will be held at the Regency Hotel Dublin, Ireland, 2-5th of April. Finances and arrangements all well under way.

The 2008 meeting will be organized by Imperial College London and held at the Institute of Physics.

Other sponsored meetings:

In the light of the budget which we had just been made aware of for 2007.

Technological Plasma Workshop to be held in Manchester - December 2006 (£700)

Plasmatics meeting organized by Strathclyde University - February

Low Temperature Plasma diagnostics workshop – April

QuAMP - September

York University ELM's meeting - Summer

All four 2007 meetings to receive £500 due to limited budget for 2007

QuAMP:

Plasma Physics continues to have difficulties finding students to attend the QuAMP meeting. While the group supports a cross DAMOPP meeting of this nature, with the large number of dedicated summer schools and conferences in Plasma Physics each year, we struggle to see how to make the most of this meeting. No conclusions were reached.

Other Business:

The website will continue to be maintained by a PPG committee member, currently Kevin Ronald. He is currently undertaking to modernize the group's web pages.

A letter of disappointment will be sent to the President of the IoP that Plasma Physics was not covered in the Review of Physics, pointing out the large contribution made to this field by the UK and its international importance (ITER, NIF, and to Industry).

Will approach a representative from industry to attend a committee meeting in 2007 with a view to potentially co-opting an industrial committee member.

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AMIG

Report from Edward Armour, Nottingham (Chairman)

Since the last meeting, AMIG held a one-day meeting at Belfast on 8 June, 2006. During this meeting, Professor Phil Burke presented the David Bates prize to Professor Jonathan Tennyson from UCL. The AMIG participated fully in the QuAMP III Student Summer School at Durham in September 2006, providing Sessions on the experimental and theoretical aspects of atomic and molecular interactions with the purpose of helping research students working in this field. AMIG plans to hold a Workshop at the University of Ireland at Maynooth, near Dublin, on 25 and 26 January, 2007. This will

be similar to the Workshop held at Nottingham in January, 2006 and will give research students an opportunity both to give a talk on their work and to hear some descriptions of current research by senior staff. Anyone interested is very welcome to attend. Details are on the AMIG website.

As regards the content of QuAMP IV, it is understood that this conference will be different from QuAMPS II and III in that it will not be a Summer School but a conference at which experts in the DAMOPP field give talks. I think that our programme of talks should cover as much of the AMIG area of interest as possible. We should not have speakers from within other DAMOPP areas. Other sections will be able to represent themselves. However, border and overlap areas should be considered. It may be appropriate to have a speaker in this area in the AMIG programme or in another DAMOPP section's program.

Molecular Physics

The Mol Phys Group held a one day meeting at York (6th July 2006). This was well attended with nine invited speakers on the general theme of "Spectroscopy and Dynamics Across the Spectrum". Invited speakers included Maurice Janssen (Vrije Universiteit, Netherlands) talking about the latest developments in imaging techniques, and Jonathan Tennyson (UCL) who presented the never ending story of H₂O spectroscopy (in e.g. Solar environments). Unfortunately the planned presentation of the Bates Medal to Prof J M Brown at this meeting had to be postponed due to illness.

The meeting itself was preceded on the previous day by the annual ANUMOCP meeting which is traditionally supported by the Group. ANUMOCP features presentations by student and postdoctoral researchers, which this year as ever were delivered at an impressive standard. The timing and use of a common site in this year's arrangements allowed for attendees at the ANUMOCP meeting to stay over at nominal cost for the Mol. Phys. Group meeting the following day.

The Group also contributed speakers and a tutorial session on electron scattering for the third QuAMP meeting in Durham in September.

For 2007 the Group plans to hold two 1/2 day meetings at Nottingham and UCL, and discussions are underway with a view to holding a two or three day joint meeting mid-year with the Spectroscopy and Dynamics Group of the RSC.

QEP

Awaiting Report.

QQQ

The QQQ group was officially opened by IoP on 23/03/06 with an interim committee consisting of

Dr T P Spiller (Chair), Quantum Information Processing Group, Hewlett-Packard Laboratories

Prof J B C Whitaker (Secretary), School of Chemistry, University of Leeds

Dr H Margolis (Treasurer), Centre for Basic, Thermal and Length Metrology, NPL

Prof C S Adams, Department of Physics, Durham University

Dr E Andersson, Department of Physics, University of Strathclyde

Prof J J Baumberg, School of Physics & Astronomy, School of Electronics & Computer Science, University of Southampton

Dr S Benjamin, Department of Materials, University of Oxford

Prof T M Fromhold, School of Physics and Astronomy, University of Nottingham

Prof W Lange, Department of Physics and Astronomy, University of Sussex

Prof J G Rarity, Department of Engineering, University of Bristol

The group sponsored meetings:

Poster prizes of £100 each at CMMP06, CCP6 coherent control, QEP17 and QuAMP III, additional sponsorship of £100 each to CMMP06, CCP6 and QEP 17 to support small student bursaries or other costs etc. as the local organizers thought fit. The aim of this modest expenditure was to promote the existence of the new group to as wide a potential audience as possible. The bulk of the 2005/6 budget, £1500, was allocated to the QuAMP III 2006 meeting in Durham. There we held our first AGM, at which all the interim committee members were formally voted onto the committee. In the coming year the group plans to hold the following meetings:

Up to four poster prizes of £100 each should be awarded in 2007. We identified CMMP07 (Condensed Matter and Materials Physics), QuAMP IV (Quantum, Atomic, Molecular and Plasma Physics) and PAQ07 (Photons, Atoms and Qubits) as obvious potential meetings for these awards.

To support CMMP07 11-13 April 07, Leicester (£100 in addition to poster prize).

To support PAQ07 (provisional date 3-7 Sept 07?) through a poster prize and reduced fees for QQQ members.

To support QuAMP IV to be held in London, provisionally Sept 17-21, 2007. We propose to organise a 1.5 day meeting as a fully integrated part of QuAMP IV and to use this as the platform for the AGM. We need to urgently form a programme organising committee with the idea of inviting and sponsoring at least three “visionary” speakers to give key-note/tutorial talks.

To support up to 6 student bursaries of up to £250 each. The scheme to be advertised in the newsletter. The justification for 6 bursaries is that this represents 10% of the membership. We will argue in future years to increase this sum proportionately to the Membership. Applications would be open to student members of QQQ who would be asked to submit a case for support to a member of the committee (no more than 1 A4 page). The case would be circulated by email to the committee and a decision reached similarly.

To support the Measurement QIP workshop 18-21 March 07, Oxford (Pieter Kok). A short case for support needs made but we anticipate supporting the meeting by up to £500.

Jonathan Underwood presented a proposal for support of a filming project in collaboration with Open University who currently revising their quantum mechanics course material. It was agreed that this was an excellent candidate proposal for the QIP IRC outreach funds.

In addition, two key tasks are to produce a strong QQQ website and to attract new members for the group. Some moan about the IoP web incompetence. IoP took 3 months to even set up very basic web pages and have still to transfer material to the new IoP pages. They claim this will all change, but we'll see...

4. DAMOPP budget

The issues of the budget were discussed at length by Nigel Mason, who is on the IOP group that makes decisions about all group and division budgets. It was noted that DAMOPP has a budget of £3500 for 2007, including £1.5k towards the cost of QuAMP2007.

5. Thank you from DAMOPP to Nigel Mason (ex treasurer/secretary)

Ed Hinds and the committee formally thanked Nigel Mason for the work that he has done for DAMOPP, as secretary and treasurer. Nigel has handed over the position to Andrew Murray from Manchester after many years of excellent service to the division. He has also resigned after many years as a highly effective treasurer.

6. The David Bates Prize

It was noted that the new Thomson prize to be issued by the IOP will probably clash with the existing Sir David Bates Prize which is presented by DAMOPP. The new prize will be a major award for AMO physics from the IOP, and will be directly awarded by the IOP (hence DAMOPP will not have the same say in who is awarded this prize).

It was agreed that DAMOPP should no longer award the David Bates Prize, but that the money which is requested for this remain in the DAMOPP budget. This should then be awarded to younger members of the community as a prize or series of prizes. The exact nature of this has yet to be discussed.

7. Election of a Treasurer for DAMOPP

Viv Kendon enthusiastically agreed to become the new treasurer of DAMOPP, after being proposed by Ed Hinds.

ACTION: Andrew to send information from the IOP about the position, and to contact Sarah Verth to tell the IOP that Viv is now the treasurer of DAMOPP.

8. Discussion of the DAMOPP web page

The DAMOPP web page was extensively discussed. It was noted that there still is no link to the QQQ group web page, and that the QQQ group has setup their own web page. Nigel indicated that IOP policy is that NO web page or links through the IOP groups/divisions can be to external servers. There appears to be no facility for dynamic web pages within the IOP site.

Ideas for what should be on the web pages were discussed and these should be sent to Andrew for collation. Clearly the DAMOPP page should have links to all group web pages.

ACTION: All to send the ideas of what the DAMOPP pages should be to Andrew.

It was felt that DAMOPP needs to put pressure on to the IOP regarding the web pages, and that members need to document the problems which they find to be sent to Andrew.

ACTION: All to collate problems with IOP web pages & send to Andrew to document.

ACTION: Ed Hinds to write to the IOP expressing the general dissatisfaction about the QQQ web page, and to ask for assurance that this will be corrected as soon as possible.

ACTION: Ed Hinds and Andrew Murray to look at the DAMOPP web pages together in detail and to consider how they should be improved.

It was noted that further discussions are necessary, and that this needs to be put on to the agenda for the next meeting.

9. Any other Business.

Discussions need to take place about QuAMP2008. This is to be put onto the agenda of the next DAMOPP meeting.

Date of next meeting: February 2007.

ACTION: Andrew to approach members to ascertain when next meeting is to be held.

End of DAMOPP meeting: 4pm.