

Monica's Monthly Message



November & December 2011



Bumper Christmas Issue

Dear all,

Well, we have staggered through to the end of the year, without, as far as I am aware, too many casualties. We held our first DPS Christmas lunch at the Calcutta Brasserie in Stony Stratford last week, and 76 people attended – thank you all for coming, and thank you to **Manish Patel** for organising it. We also had our first DPS Secret Santa, organised by **Anthony Davenport** and **Phillippa Smith** – thanks to them for an entertaining morning. And thank you to my Secret Santa gift-giver, from whom I received a mug decorated with the slogan 'The Power of Cake'. It seems that my prime motivation has been discovered....

Accommodation: I would like to thank all who have worked so hard to get everyone into their correct desk, with all their goods and chattels around them. A lot of people have been involved, but I especially wish to thank Chris Taunt from Estates, who has been tirelessly cheerful and patient throughout the trauma. I know that there are still problems, with phones, printers, pigeonholes, etc., but these will gradually get solved. We have to get social space sorted out, the coffee club re-established, the lobby developed into a welcoming space that lets visitors know who we are, and walls and stairwells decorated with appropriate art and images. When all that is done, and the inhabitants of K Block settled ----we'll have another launch party!!

I would like to extend an invitation to staff based in the regions to come and look round the RHB, and see where they have hot desks allocated. Another thing that I think we should do is have an Open Day for everyone in DPS, with labs open, and people talking about what they do. I shall devolve responsibility for organising this to the HoDis, so we must keep on at them to make sure it happens.

People: we have two new arrivals: **George and Harley Ringrose**, so congratulations to Tim (and Hayleigh!) Ringrose on the arrival of the twins. We also welcome **Dr Tom Greig**, who started a 5-year e2v Fellowship in November. He will be working on the development of CMOS image sensors for space applications. Our administrative staff has also doubled, with the appointment of **Louise Patel** as Department Administrator and **Patricia Taylor** (who has joined us from OU Worldwide) as a secretary supporting STFC-funded staff – glad to have you both on board. We have one new Doctor, **Yvonne Sutton**, who defended her thesis on acoustic plasmas successfully – congratulations to Yvonne and best wishes as she completes a short-term contract in PSS, working on chondrule-formation with Andreas Morlok, prior to taking up a consultancy with MCT. Congratulations also to **Jimena Gorfinkel** on her promotion to Senior Lecturer. And not forgetting congratulations to **Matt Balme** (Aurora Fellow) and **Sam Eden** (EPSRC Senior Fellow) who have been moved onto tenure track, and become fully-fledged lecturers. **Professor Sir Peter Knight FRS**, who runs the Royal Society Kavli Centre at Chicheley Hall, has accepted an appointment as a Visiting Research Professor. **Dr Andrew Ball**, a former PDRA in PSSRI, currently a Research Fellow at ESA in the Netherlands, has been appointed as an Honorary Visiting Research Fellow.

Teaching: over the past few months, there have been several discussions on our curriculum and how it might be developed given the changing landscape – both external, regarding increased fees, and internal, as we move towards registration of students for a degree rather than a module. Because it is almost impossible to predict how student numbers will react to these changes, decisions about

module combinations have been difficult to reach. The most recent curriculum plan was presented to, and accepted by the Science Faculty Committee at the beginning of December; how this will translate into a full teaching programme for the Faculty will emerge over the coming few months.

Research: **Matt Balme** is having a good month – as well as becoming tenure-track, he has also won a grant from the Leverhulme Foundation for a PDRA to study martian landforms. **David Barfield** has been busy, as staff in CEPSAR submitted 4 NERC Fellowship applications and 7 applications to the UK Space Agency, totalling something like £5M in bids. Thank you David for getting these all in on time, despite the best efforts of the submitters to confuse RED forms, costings, etc. **Simon Green** and **Manish Patel** are part of a team that has been approved funding for an EU Framework 7 project called NEOShield - A Global Approach to Near-Earth Object Impact Threat Mitigation. It is a 5m Euro project with a consortium of 13 institutes from universities and industry in Germany, France, the UK, Spain, USA and Russia, led by DLR Berlin. The OU involvement is to study momentum transfer from high-speed impactors using the Light Gas Gun in the Hypervelocity Impact Lab, and is worth 275k euros. **Andrew Holland** is in the process of putting in a proposal to UK Space Agency for the build phase of the VIS instrument on Euclid. The OU will lead the radiation damage studies and work with Durham University on the correction techniques to enable the instrument to meet its full scientific performance. **Stephen Lewis** is part of a team, led by NASA Jet Propulsion Laboratory, involved in predicting the likely range of atmospheric conditions that the recently-launched MSL mission might encounter during its complex landing procedure - a global climate model of Mars and a detailed regional model have both been run at the OU. **Adam Stevens** has been awarded a bursary by STFC to attend a two day Media and Communication Skills Training Course organised by the Royal Society.

The **Journal Club** will be starting again in the new year, and **Sam Eden** and **Jim Hague** have circulated a timetable for when people are leading discussion. The ground rules are as follows: please choose a relatively recent journal article that you are interested in (it could be one you are familiar with from your research). Send the title, journal reference and abstract of the article to Sci-Dps-All-List@open.ac.uk on the Monday before your talk. Your presentation should be 20 minutes + 10 mins for questions and general discussion. Talks will be in the Robert Hooke Seminar Room at 12:30pm on Wednesdays

There are plans for a student-led Society to be formed, along the lines of RocSoc (DEEE). It hasn't got a name, a constitution or a logo. Neither has it got a vision, a strategy or a mission statement, so I'm not sure how successful it will be...but it does have a potential leader, in **Anthony Davenport**. He will be getting the society established in the new year. I have promised beer for the inaugural meeting.

Out and about: **Iain Gilmour** gave a keynote lecture at the "Isotopes in Astrochemistry" workshop at the Lorentz Center, University of Leiden at the beginning of December. **Monica Grady** gave an IoP Lecture "Astronomy by Microscope" at the OU on 13th December, and also made presentations at a Royal Astronomical Society meeting in London and an Astrobiology Society workshop in Cambridge. **Ulrich Kolb** and **Hazel Rymer** attended the inauguration ceremony of a new remote telescope at the Observatori Astronomic (OAM) Mallorca at the end of October. See <https://intranet-gw.open.ac.uk/ouintra/story.aspx?id=22373> and http://pirate.open.ac.uk/news_Nov11.html for pictures and more details. Funded by Hamburg University, the new facility is modelled on the OU's PIRATE telescope, also based at OAM, which allows students and researchers to observe the Mallorcan sky while sitting at their computers in the UK. OU expertise has helped to set up the new telescope and the OU and OAM will share the facility with Hamburg University. They will also collaborate on research and teaching projects on the PIRATE telescope, which the OU is upgrading. **Bob Lambourne** was part of the UK delegation to the General Assembly of the International Union of Pure and Applied Physics (the physics counterpart to the IAU). He has been elected Chair of the International Commission on Physics Education (ICPE). The post continues until November 2014. The first challenge is representing the ICPE in the organization of the first World Conference on Physics Education which will take place in Istanbul, Turkey, 1-6 July 2012. **Dave Rothery** gave a public lecture at the STFC's Daresbury Science & Innovation Campus on "Volcanoes, earthquakes and tsunamis in the news" on 9th December, and will deliver a similar presentation as the 2012 Distinguished Lecturer for the Earth Science Teachers' Association/Earth Science Education Unit at the Association for Science Education Conference in Liverpool University on Thursday 5th January 2012. Dave has

also accepted an invitation to become a member of an evaluation committee overseeing the newly created *ClerVolc* (Clermont-Ferrand Centre of Volcano Studies) project, a 13M euros, ten year research initiative. **Steve Serjeant** attended a workshop in Cape Town organised by the International Astronomical Union's Office of Astronomy for Development (OAD). The goal of the OAD is to use astronomy education to develop the economies of developing world countries –especially sub-Saharan Africa- through public engagement, education, and research. Steve was exploring links that we could make with the OAD, and how we could work with them. Both the OU and the OAD are keen to exploit the OU's distance teaching skills and experience in this enterprise. **John Zarnecki** has returned from 4 weeks at the Beijing University of Aeronautics & Astronautics (BUAA) (also known as Beihang University), where he gave presentations on our Space- and Planetary Science-related research to the China Academy of Space Technology (CAST), and the Beijing Institute of Space Machinery & Electricity. He also gave 4 seminars to BUAA Masters and Research students, and has established a series of possible research collaboration areas with BUAA staff.

Forthcoming attractions: A Life Scientific – BBC Radio 4 next week features CEPSAR's **Professor Colin Pillinger** in discussion with Jim Al-Khalili. Broadcast Tuesday 27 December 09.00 and 21.30. The Daily Telegraph's Pick of the Day by Gillian Reynolds.....*This is where the romantic side of science shows as Dr Jim Al-Khalili talks to Colin Pillinger. On this day eight years ago, Pillinger was still optimistic that the British Beagle 2 lander he'd spent years designing, building and publicising would be found somewhere on the surface of Mars. It never has been. But even if that means it's been lost somewhere in space, Pillinger is convinced that valuable lessons can be learned.*

The UK Planetary Forum Early Career Scientists' Meeting will be happening at the OU on Friday January 20th. This is a valuable opportunity to meet your peer-group of researchers – the people who will be reviewing your grant proposals as your carer progresses – so attendance is recommended. The abstract deadline is January 6th.

http://www.ukplanetaryforum.rl.ac.uk/early_careers_10/

Publications: !!!! **REMEMBER TO UPDATE ALL PUBLICATIONS ON ORO** !!!!

Balme M. R., Gupta S., Gallagher C. and Bargery A. (editors). Martian Geomorphology. GSL Special Publication No. 356.

Hague J. P. (2011). Tunable graphene band gaps from superstrate-mediated interactions. Phys. Rev. B 84, 155438

Lisse C. M., Wyatt M. C., Chen C. H., **Morlok A.**, Watson D. M., Manoj P., Sheehan, P., Currie T. M., Thebault P. and Sitko M. L. (2011). Spitzer Evidence for a Late Heavy Bombardment and the Formation of Ureilites in η Corvi at ~ 1 Gyr. Ap. J. [2011arXiv1110.4172L](https://arxiv.org/abs/2011arXiv1110.4172L).

Pang D. Y. and **Mackintosh R.S.** (2011) Dynamic polarization potential due to ${}^6\text{Li}$ breakup on ${}^{12}\text{C}$. , Phys. Rev. C 84, 064611 DOI: 10.1103/PhysRevC.84.064611.

Soman M. R., Hall D. J., Tutt J. H., Murray N. J., Holland A. D., Schmitt T., Raabe J. and Schmitt B. (2011). Improving the spatial resolution of a soft X-ray Charge Coupled Device used for Resonant Inelastic X-ray Scattering. *J Instrum.* 6 C11021. <http://dx.doi.org/10.1088/1748-0221/6/11/C11021>

My regular disclaimer appears here: if your juicy item of news, or latest publication is missing from my newsletter, it is because you didn't tell me....

I hope that everyone has a restful holiday, surviving visits to and/or by family and friends, that Santa Claus brings everyone suitable gifts, and that all return revived and re-energised for the New Year and the challenges that it will bring us.

With best wishes

Mon

PS: New Year's resolution: I will produce the Monthly Message in a more timely fashion.....