Research IT
Helping you achieve your research outcomes
A newsletter from IT Services: Research IT

Welcome to issue #31, November 2015, in a [regular series](#) of updates on IT research support and facilities for postgraduates, researchers and academics of The University of Manchester.

Your main contact email address for research computing support is given on the last page; emailing your queries this way will automatically raise a job for you in the IT Services helpdesk system. Every day, routine work should continue to be submitted through the IT Service Desk on +44 (0) 161 306 5544 or via the Support Centre online at: www.itservices.manchester.ac.uk/help/

New Research IT Website

The Research IT website has recently undergone a refresh; the new look website includes information on our [services](#) , a [contact us](#) section and individual staff profiles in the [about us](#) section to help you find out more about the wide range of skills we have to assist you. Please take a look at:
http://www.itservices.manchester.ac.uk/research/

News

Research IT Brochure

We recently published a brochure which is designed to inform you about our eResearch platforms, training and other support services. You can pick up a copy from the IT Services Support Centre in the Kilburn Building or view it online [here.](#)

Researcher Satisfaction Survey

We've recently launched an ongoing survey to assess the use of our facilities by you, our users. Please help us to evaluate and improve our services by taking a couple of minutes to complete this [short survey.](#)

Upcoming Events

Software Carpentry for Women

The Software Sustainability Institute in collaboration with ARCHER and Women in HPC is organising the first Software Carpentry workshop for Women in Science and Engineering (WiSE) in the UK. The event will take place in the Kilburn Building, University of Mancheser on 14 and 15 December 2015.

Software Carpentry's mission is to help scientists and engineers get more research done in less time and with less pain by teaching them basic lab skills for scientific computing. This hands-on workshop will cover basic concepts and tools, including program design, version control, data management, and task automation. Participants will be encouraged to help one another and to apply what they have learned to their own research problems.

The course is aimed at female postgraduate students, researchers and engineers who are familiar with basic programming concepts (like loops, conditionals, arrays, and functions) but need help to translate this knowledge into practical tools to help them work more productively.

Apart from learning a set of useful skills the participants will have a unique opportunity to network and discuss their experiences in working in computational research area. For more details and registration please visit this page.

eSeminars from Dassault Systèmes

In November, Dassault Systèmes are offering two live eSeminars introducing new capabilities in their simulation platform that will be of interest to engineers, materials scientists, physicists, mathematicians and biologists across the University. The seminars are:

Structural - Electromagnetic Co-Design, 12 November

Design and Optimisation of Composite Structures, 17 November

To register to join the seminars please follow the links above.

These and other events are also advertised through the University finite elements list: finite-elements@listserv.manchester.ac.uk. If you are familiar with listserv, please join in the normal way. Otherwise email lee.margetts@manchester.ac.uk to be added to the list.

Data Science Club Meeting

The first meeting of the Data Science Club will be taking place at **2pm on Wednesday 25 November in 2.220 University Place.**

The club is a great opportunity for researchers, from those new to data analysis through to the field-leaders, to come together and hear about the cutting edge in data science methods and techniques being applied in research areas right across the university, the public sector and in business. Data Science is inherently multidisciplinary and collaborative - come along to share with others what you're working on, find collaborators and develop ideas on exciting future projects.

For more information and to register, please visit the event webpage.

Computing Insight UK 2015

Computing Insight UK will take place at the Ricoh Arena in Coventry from 8-9 December 2015.

This new event replaces the internationally renowned Machine Evaluation Workshop (MEW) and will build on the heritage of the MEW and offer you the chance to hear about the latest developments in high performance computing, cloud and data analytics.

The main programme for CIUK2015 is now confirmed – with speakers from Rolls-Royce, NNL, Intel, Oxford University, the Francis Crick Institute and many more.

Fees for the two day event are £99 which includes lunch and refreshments on both days and the conference dinner on 8 December. Registration is open online.

Other News

The Big Bang Fair's STEMoji's

The Big Bang Fair recently unveiled a collection of "STEMojis" – emoji versions of 23 science, technology, engineering and maths (STEM) heroes including Professor Brian Cox, Grace Hopper and Sir Isaac Newton. As well as celebrating those who contributed significantly to STEM, The Big Bang Fair hopes to use the initiative to showcase the exciting opportunities available in STEM. More information is available here.

Vacancies

Are you trying to recruit someone? Let us know and we will help you advertise here.

Funded PhD Position

A PhD studentship funded by the Defence Science and Technology Laboratory (DSTL) has opened up in the School of Earth, Atmospheric and Environmental Sciences. The project is titled **"Improved algorithmic methods for identification of biological airborne particulate matter"** and will allow you to evaluate new supervised learning algorithms for real-time discrimination of bio-aerosol types in order to assess future PBA sensor networks, improve emission parameterisations and provide forecast validation. The project will use new laboratory and field databases based on technological advances in real-time bioaerosol detection hardware including on-the-fly

bioaerosol identification and collection within urban and agricultural aerosol populations.

You will work within a highly multidisciplinary team, including project partners in DSTL and the Laboratoire des sciences du climat et l'environnement in Paris. The project has to start before 31 December 2015 and is open to those with a minimum 2:1 degree in Physical Sciences.

If interested, please get in touch with Dr David Topping for more information: david.topping@manchester.ac.uk

Internship Opportunity

Research IT is working with the Manchester Graduate Internship Programme (MGIP) to offer two recent graduates the chance to work on a small number of innovative projects. If you are aware of competent graduates who would thrive by working with members of Research IT then please encourage them to contact Michael Bane: michael.bane@manchester.ac.uk, Research Applications Manager, for an informal chat.

Research Computing Facilities

IT Services supports University of Manchester researchers and staff on a wide range of facilities including your own desktop, University owned clusters and externally hosted facilities. Links to a range of facilities are provided below. If you would like to find out more about the best option for your particular research needs, please contact us.

- University of Manchester Computational Shared Facility
- University of Manchester Condor Service
- N8 Regional High Performance Computing Service (N8 HPC)
- PRACE EU High Performance Computing Service
- UK Hartree Centre Facilities
- PRACE EU High Performance Computing Service
- XSEDE USA High Performance Computing Service

Access to ARCHER

Researchers can request anything from pump-priming access to full projects on the UK High Performance Computing Service (ARCHER) for suitability for their

work all year round via a lightweight application process. Click here for details.

Research Computing Training

University of Manchester Courses

Research IT is running a short series of hands-on training courses which provide skills for researchers to further enhance their research. For information on our courses or other training that we can provide, please take a look at our training catalogue or contact us.

PRACE Advanced Training Courses

The Partnership for Advanced Computing in Europe (PRACE) offers free courses at different HPC centres in Europe. Courses offered in November and December 2015 include:

18-20 Nov	High Performance Molecular Dynamics	Italy
23-24 Nov	Share Memory Programming	York
23-27 Nov	Parallel Programming Workshop	Spain
24-25 Nov	Practical Software Development	Edinburgh
30 Nov- 4 Dec	Debugging and Optimization	France
1-3 Dec	Python for Computational Science	Italy
7-9 Dec	Programming on GPU's	France
8-10 Dec	Intro to Accelerator's	Finland
10-11 Dec	Node-Level Performance Engineering	Germany
10-11 Dec	Efficient Parallel IO on Archer	Oxford
14-15 Dec	Software Carpentry	Portsmouth
15-16 Dec	Intro to Simulation Environment	Spain
15-16 Dec	Shared-Memory Programming with OpenMP	York
16 Dec	Intro to OpenMP and MPI	Portsmouth

ARCHER Training Opportunities

ARCHER courses are free to all academics. Full details and registration information online.

23-24 Nov	Scientific Python	Imperial
24-25 Nov	Practical Software Development	Edinburgh
1-2 Dec	Single Node Performance Optimisation	Bristol
10-11 Dec	Efficient Parallel IO on ARCHER	Oxford
14-15 Dec	Software Carpentry for Women	Manchester
15-16 Dec	Shared Memory Programming with OpenMP	York

Subject-specific Email Lists

Join the email lists below to collaborate and share ideas with a broad network of staff across campus. Please note that these email lists are subject specific discussion forums, rather than a way of contacting IT Services.

University HPC PhD Network

finite-elements@listserv.manchester.ac.uk

fortran@listserv.manchester.ac.uk

sciprogramming@listserv.manchester.ac.uk

university-gpuclub@listserv.manchester.ac.uk

Useful Links

Faculty of Humanities Blog for Researchers

Faculty of Humanities Training Hub for Postgraduates

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Online Copy

If you have received a printed copy of this newsletter and wish to follow the links, staff can download an electronic copy with clickable links at:
http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=25995

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Next edition

The next edition of this newsletter will be circulated at the beginning of December 2015.

If you have any news to contribute, please contact Gillian Sinclair gillian.sinclair@manchester.ac.uk and Dalinder Sall dalinder.sall@manchester.ac.uk at any time.

Items received before 20 November 2015 will be included in the next edition. News from academic colleagues and researchers are most welcome.