

## National eResearch Newsletter - April 2021

### Message from AeRO:

Even though Easter has come and gone, it's still hard to believe that we are now more than a quarter of the way through the year. For AeRO, this means that planning is well under way for the 2021 AeRO Forum (July 7), and the eResearch Conference (Oct 11-15).

This year the AeRO Forum will have the theme of "Sustaining eResearch" and we will be hearing perspectives from Government, Infrastructure / Service providers, and Researchers, on what it takes to keep activities going in an environment where funding is always uncertain. Watch <https://aero.edu.au/forum-2021/>. We look forward to seeing you in July!

We are also delighted to announce that ARDC has decided to join AeRO as a full member (see below).

Phil Gurney, CEO

### CONTENTS:

- \* ARDC Joins AeRO.
- \* AMA Phase 1 Technology Timelines: 19-Apr.
- \* RDA Virtual Plenary 17: starting 20-Apr.
- \* Astronomy and Australia's Supercomputers: 29-Apr.
- \* ARCOS Symposium: 5/6-May.
- \* Data Science Week: 10/14-May.
- \* Seeking Perth-based eResearch Collaboration.
- \* Documentary Video: Data Federations in Agriculture.
- \* Join Pawsey Established CFD CoP in Australia.
- \* Universities Unite for Consistency in RDM.
- \* ML4AU – a Machine Learning CoP for Australia.
- \* Australian Research Data Management CoP.
- \* TERN New Photosynthetic Pathways.
- \* Standards to Assist Conservation and Decision-Making.
- \* Building a Healthy Ecosystem of Opportunity for Research in NZ.
- \* What's Possible on NeSI Platforms - New Webinar Series.
- \* NZ RSE Conference Returns in Spring 2021.
- \* Modelling a Potential COVID-19 Cure.
- \* A New Mechanism for Ice-Shelf Melting.
- \* NCI Supercomputing and Data Training Calendar.
- \* eResearch Jobs.

ARDC Joins AeRO



Australian Research Data Commons



AeRO is pleased to announce that the Australian Research Data Commons (ARDC), has joined AeRO as our latest full member.

The ARDC is an NCRIS facility that provides the Australian research community with access to leading edge national digital infrastructure, platforms, skills and high-quality data collections.

Mr Ian Duncan, ARDC Director of Outreach noted that "The ARDC has had a long association with AeRO, and we are excited to formally continue this partnership. ARDC membership acknowledges the important role that AeRO plays as an independent and accessible sector community. We are excited to be joining the AeRO family and look forward to the collaboration opportunities ahead."

Dr Phil Gurney, interim CEO of AeRO, said "The ARDC and its antecedents have worked closely with AeRO for several years, and have been strong supporters of AeRO's eResearch conference and other events. We are delighted to welcome the ARDC as a member, and look forward to working together to deliver a range of projects of value to the eResearch community".

## AMA Phase 1 Technology Timelines: 19-Apr



Pawsey Supercomputing Centre invites you to join us for a Pawsey Hour (Ask. Me. Anything.), on 19 April 2021, 10.00am -11.00 AWST.

This is an opportunity to join in a discussion with Pawsey expert staff and an online community of peers, focusing on the Phase 1 technology timelines at the Pawsey. If you have any pressing questions please join the session, especially if you are:

- New researchers who want to know if Pawsey services are for you;
- Current users who have specific questions about our infrastructure and expertise, or your research challenges (within the Pawsey context).

To register, click here: <https://pawsey.us4.list-manage.com/track/click?u=50c84dd130d63115084534fb3&id=457291912f&e=cde2c084de>.

## RDA Virtual Plenary 17: 20-22 April 2021, Edinburgh, Scotland: 20-Apr



The Digital Curation Centre in collaboration with Jisc and STFC-UKRI will be hosting RDA'S 17th Plenary meeting on 20-22 April 2021, as a fully virtual event.

See <https://www.rd-alliance.org/plenaries/rda-17th-plenary-meeting-edinburgh-hybrid>.

The Call for Sessions has now closed, and sessions have been reviewed by the Technical Advisory Board (TAB), and the preliminary programme has now been published (<https://www.rd-alliance.org/rdas-17th-plenary-meeting-programme>).

The Call for Posters (<https://www.rd-alliance.org/rdas-17th-plenary-call-posters>) closes on 26 March 2021.

## Astronomy and Australia's Supercomputers: 29-Apr



This event is part of Pawsey's new bi-monthly "Supercomputing Series". It will feature the Astronomy community, as they discuss possibilities of the Centre's new capabilities on 29 April, 9.30am AWST / 11.30am AEST.

This session will be facilitated by Professor Alan Duffy, with the following panel:

- Dr Natasha Hurley-Walker (Curtin University);
- Dr Luigi Iapichino, Lead of the Quantum Computing team at Leibniz Supercomputing Center;
- Dr Elaine Sadler, ATNF Chief Scientist at CSIRO Astronomy and Space Science.

They will discuss:

- Astronomy and the researcher's work;
- Current limitations and the potential to overcome them;
- The next generation of astronomy research.

To register, click here: <https://pawsey.us4.list-manage.com/track/click?u=50c84dd130d63115084534fb3&id=9bde3b2105&e=cde2c084de>.

## ARCOS Symposium: 5/6-May



The Australian Research Container Orchestration Service (ARCOS) would like to welcome everyone within the Australian research sector developing Kubernetes and container solutions to join the ARCOS Symposium. The event will be held on the afternoons of May 5 and 6.

- Hear from research groups and organisations across Australia on how they are using containers and Kubernetes;
- Meet experts and make new connections, and join the community of people who are working in containers and Kubernetes for research;
- Contribute to the design of new services, and help shape community activities like training and expertise sharing.

To register <https://www.eventbrite.com.au/e/arcos-symposium-day-1-tickets-144929176067>.

## Data Science Week: 10/14-May



DSW2021 will run during the week of 10 - 14 May 2021 and aims to bring together a community of data scientists, technologists, visualisers, educators and more to raise awareness around data science, increase the uptake, and discuss trending topics and ideas.

This is achieved through contributions from the community such as blog posts, training, events, conferences, workshops or any other idea members of the community may have.

Offer to make a contribution, and then watch out for the program of events, at <https://datascienceweek.org/>.

## Seeking Perth-based eResearch Collaboration



Are you considering running an event in Perth this year? If so then we'd love to hear from you!

As a result of the cancellation of the physical eResearch conference in Perth due to CoVid, AeRO is currently holding deposit funds at the Pan Pacific Hotel in Perth <https://www.panpacific.com/en/hotels-and-resorts/pp-perth.html>.

We are seeking expressions of interest from organisations interested in collaborating/co-hosting events at this venue in the upcoming months. The venue has outstanding facilities and can cater from small meetings to larger workshops and conferences.

For more information, please contact Phil Gurney AeRO CEO [phil@aero.edu.au](mailto:phil@aero.edu.au).

## Documentary Video: Data Federations in Agriculture

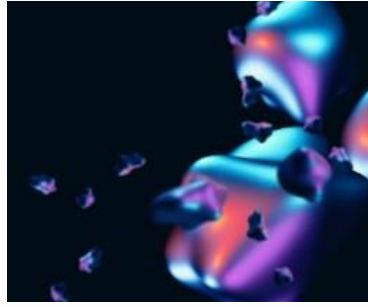


Federation University Australia's Centre for eResearch and Digital Innovation (CeRDI) recently launched a documentary video: Data Federations in Agriculture. This short film commissioned by CeRDI, and directed and produced by Wind and Sky Productions, explores big data and data federation, examining the application of technology for federating agricultural research data.

Visualising Austrasia's Soils provides the backdrop and project exemplar for exploring and discussing data federation. CeRDI's Assoc Prof Peter Dahlhaus together with Mr Paul Box, Social Architect at CSIRO Land and Water, provide the core commentary for the film.

For further information about this and other CeRDI documentary videos, visit: <https://www.cerdi.edu.au/videos#featured>.

## Join Pawsey Established CFD Community of Practice in Australia



With the support and participation of the Australasian Fluid Mechanics Society, a Computational Fluid Dynamic (CFD) Community of Practices (CoP) has been launched as a result of the CFD and Australia's next generation of supercomputers event, which gathered hundreds of CFD practitioners late last year (<https://www.youtube.com/watch?v=3gcWuVbw2S8&t=739s>).

The CoP space will give CFD practitioners using supercomputers the opportunity to share their knowledge and experiences while remaining connected around High Performance Computing (HPC) topics.

To join the CoP, click here: <https://pawsey.us4.list-manage.com/track/click?u=50c84dd130d63115084534fb3&id=ad08f9e5f2&e=cde2c084de>.

## Universities Unite for Consistency in Research Data Management



Australia is drowning in data! That's why 25 of Australia's 40 universities are coming together to develop, test and validate a nationally agreed framework for research data management as part of the ARDC's Institutional Underpinnings program.

For more information, go to: <https://ardc.edu.au/news/universities-unite-for-consistency-in-research-data-management/>.

## Launching ML4AU – a Machine Learning Community of Practice for Australia

# ML4AU

To accelerate the adoption of Machine Learning among Australian researchers, Monash University and the University of Queensland are collaborating to build environments that support Machine Learning at scale, provide training, and support a national community of practice.

Read more at: <https://ardc.edu.au/news/launching-ml4au-a-machine-learning-community-of-practice-for-australia/>.

## Australian Research Data Management CoP



This community of practice has been established to provide a forum for anyone working in research data management to come together to share ideas and solve common problems.

For more information and to join the mailing list, go to: <https://sites.google.com/ardc.edu.au/rdmcommunity/home?authuser=0>.

## TERN New Photosynthetic Pathways

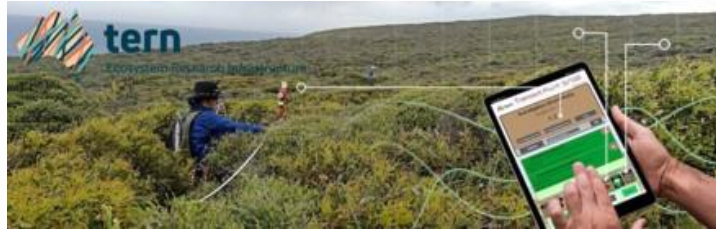


New Data! The photosynthetic pathways of all plant species in the TERN plot network are now available.

Quickly and easily download the photosynthetic pathway of every plant species recorded across TERN's entire national plot network.

For further information, go to: <https://www.tern.org.au/news-photosynthetic-pathways/>.

## Standards to Assist Conservation and Decision-Making



The Department of Agriculture, Water and the Environment and TERN are working on a project to standardise both environmental monitoring and data systems for improved decision-making. Standardised field survey protocols will assist land managers, development project operators and environmental consultants collect consistent and comparable monitoring data. In parallel, a standardised data exchange system will support better access and reuse of environmental monitoring and surveillance projects.

See: <https://www.tern.org.au/news-standards-assist-conservation-decision-making/>.

## Building a Healthy Ecosystem of Opportunity for Research in New Zealand



New Zealand eScience Infrastructure's 2020 Annual Review is now available to read online. 2020 brought to the fore a richness of people, their goals, and how we work within New Zealand's eResearch ecosystem. It emphasised challenges and opportunities we're yet to take on as a research sector; it validated earlier investments which enabled New Zealand as a nation to mount a world-leading response in facing a global pandemic, and as a sector to underpin that response with advanced research networks and high performance computing.

Read more: <https://www.nesi.org.nz/news/2021/04/nesi-2020-annual-review-working-partnership-build-healthy-ecosystem-opportunity>.

## New "NeSI Know How" Webinar Series Gives a Taste of What's Possible on NeSI Platforms



New Zealand eScience Infrastructure (NeSI) has launched a new 'NeSI know-how' webinar mini-series that cover the basics of getting started on NeSI, using Jupyter on NeSI, and incorporating GPUs into your research workflow. Each session is online, recorded, and under one hour. Check out the schedule and register today!

Read more: <https://www.nesi.org.nz/news/2021/04/register-now-one-or-all-nesi-know-how-webinars>.

## New Zealand Research Software Engineering Conference Returns in Spring 2021



New Zealand eScience Infrastructure (NeSI) is pleased to announce the New Zealand Research Software Engineering (NZRSE) Conference will be returning in September 2021!

We invite you to join us for an interactive and impactful programme that will share the tools, approaches, challenges, and opportunities related to writing code and developing applications that enable research. In 2021, we'll host most of our programme online, but also plan some in-person meetups around New Zealand. Further details will be announced soon – bookmark the website and join the mailing list!

More information: <https://www.rseconference.nz/>.

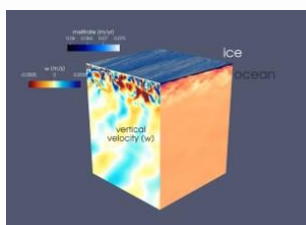
## Modelling a Potential COVID-19 Cure



A team from RMIT and Monash Universities doing molecular simulations with NCI's Gadi supercomputer is focusing on disrupting the binding of the COVID-19 virus to human cells as a potential approach to treating COVID-19 infection.

Read more at: <https://nci.org.au/research/research-highlights/modelling-a-potential-covid-19-cure>.

## A New Mechanism for Ice-Shelf Melting

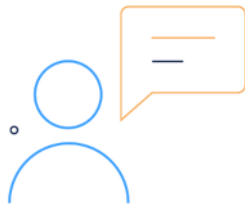


The melting of ice sheets impacts sea level rise and ocean circulation, which impacts global climate. Understanding how ice shelves melt means we can get a better sense of sea-level rise, of ocean circulation, and of global weather.

Research from Dr Madelaine Rosevear from the University of Tasmania, Dr Bishakhdatta Gayen from the University of Melbourne and Dr Ben Galton Fenzi from the Australian Antarctic Division, has shown that as the ice melts, it drives a unique type of flow in the ocean beneath it.

Read more at: <https://nci.org.au/research/research-highlights/a-new-mechanism-ice-shelf-melting>.

## NCI Supercomputing and Data Training Calendar



Current and prospective users of NCI supercomputing, virtual environment and data collections resources may be interested in attending upcoming training sessions throughout April, May and June.

The various sessions are aimed at a range of experience levels, from beginner through to advanced.

A calendar of all planned training sessions is available at <https://opus.nci.org.au/display/Help/NCI+Training>.

## eResearch Jobs



AeRO provides details of the latest eResearch job opportunities in the sector. Jobs are posted immediately to [https://twitter.com/AeRO\\_eResearch](https://twitter.com/AeRO_eResearch), and the website at <http://aero.edu.au/jobs/> is also updated.

This is a free service for the whole eResearch community - to advertise a position, simply email [loretta@aero.edu.au](mailto:loretta@aero.edu.au).

**Here are some current vacancies:** R Programmer / Ecological Modeller (with ALA), Program Manager (with ALA), Front End Software Developer (with AURIN/ATRC), Systems Administration and Support Officer (with ARDC), Marketing and Communications Specialist (with AARNet), eResearch Librarian (at Charles Darwin University), Cloud Development and Operations Engineer (at ARDC).

## Contributions

This newsletter is based on contributions from members of the eResearch community, and draws on news articles and newsletters published across the sector. The Newsletter is published around the 16th of each month. Please send all contributions (max. 100 words + link + image) or pointers to any other relevant articles or newsletters

to [editor@aero.edu.au](mailto:editor@aero.edu.au).

Newsletter archives are available at <http://aero.edu.au/newsletters/>.

Click [HERE](#) to subscribe to the eResearch Mailing List.

Thanks, Alex Reid, AeRO Newsletter Editor.

---

*Copyright © 2021 AeRO - Australian eResearch Organisations, All rights reserved.*

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).