

Canterbury Branch Royal Society of New Zealand Te Apārangi April 2024 Newsletter

Dear Member

I hope you all had a pleasant Easter break and are well as we head into Autumn.

Firstly I would like to pass on our condolences to council member and Fellow of the branch Tony and his family, , who recently lost his mother. Our thoughts are with you, Tony.

The branch held its AGM, last month and subject to those accepting we have two new councillors, joining those returning to council. We have a lot to do this year, so a larger council will help, along with your support to achieve this.

The branch secretary Rob Cruickshank resigned from the council. Rob as some of you know, has been on the council for many years, president in 2017/18 and secretary since 2019. Rob will still be active in the branch as he pursues other interests. I would like to thank him for all his service, and he has been a vital contributor to the rebuilding of the branch.

The meeting accepted the last council recommendation to keep the subscriptions as per last year and accounts will be sent out soon.

Some of the members enjoyed an afternoon at the Cotter Medical History Museum and more about its future is included in this newsletter.

Don't forget our next field trip in April again outlined below, but there are now limited spaces left so be quick to let us know if you want to come.

Finally, some exciting news with two upcoming touring lectures and what the branch may look at building around them.

The Cotter Medical History Museum field trip

About 9 members visited the museum last month, viewing a wide range of medical artefacts from microscopes, surgical and dental instruments, book, and other memorabilia. Seeing this one appreciates how far the medical treatments have come.

We also received a short lecture on the history of the museum and its future. Sadly, the museum has been told it must leave its current location. It has nowhere to reestablish the collections, so it will be place into storage, and may even be broken up. This would be a sad end to, what is considered by Te Papa, as a collection of National Significance. If anyone who missed the visit, you might be able to get one last look by contacting <u>info@cottermuseum.co.nz</u> and arrange something, but the collection is already being packed up.







Photos from the museum

Some members also attended The Beatrice Hill Tinsley Lecture 2024 touring lecture hosted by RASNZ Lecture Trust and CAS at University of Canterbury by Professor Lisa Kaltenegger is Director of the Carl Sagan Institute for the Search for Life in the Cosmos at Cornell and Associate Professor in Astronomy. the Carl Sagon Institute. The lecture titled Searching for Alien Earths, left us with some thoughts of the diversity of life that could be out there, how we using the current technology find trace signatures of it, and what to do if we find it.



Students awarded travel grants.

Will Dixon, 5th year Student, Presenting on behalf of Department of Surgery, University of Otago Christchurch, Oral Presentation, A new option for reconstruction with a biological graft in Aotearoa, 2024 VSAoNZ Conference, New Plymouth, Friday 16th – Sunday 18th February 2024

Reports from grant recipients.

None have been received.

Prime Ministers Science award winners

The branch has been given two Prime Ministers award winners lectures. The first is Christchurch will be around Wednesday 14 August for Christchurch for the winner of the Prime Minister's MacDiarmid Emerging Scientist Prize winner.



The second will be in Timaru with the Prime Minister's Science Prize winner for around September.

Of course we don't know who they are, as the winners are announced by the Prime Minister on the 1st May, but book those dates into your diary.

We will book venues for these now, and the council will be considering arranging a further set of talks after these, like a Spring Series of lectures, so any ideas who we can ask, or topics please let us know.

We may also but waiting for confirmation one other and that is Professor Ann Brower who was the winner of the Charles Fleming Award in 2022. She is going to do 3-4 lectures and there's a possibility we might host one.

Lincoln University Library

We have been discussing with the Lincoln University Library about gaining access like the members have with the University of Canterbury Library.

These have been successful and currently the library is drafting up a memorandum of understanding for us to have similar access as with UC library. All going well, you will be able to borrow books and have some limited on-line access from the 1st May.

Upcoming Branch talks, field trips and related activities

Christchurch talks

Café Scientifique 22 May, we will be supporting another great activity, Cafe Scientifique. Celebrate International Biodiversity Day with an amazing line-up of guest speakers at Foundation Café on the ground floor of Tūranga Library, 6.00-7.45 pm.

Wednesday 14 August winner of the Prime Minister's MacDiarmid Emerging Scientist Prize winner. Venue TBA

Timaru talks

Prime Minister's Science Prize winner about September Venue TBA

Upcoming field trips

We have one trip for Christchurch in April.





Tuesday 23rd April 6.00pm Bridge of Remembrance with Dr Garry Morrison, Head of Classics, University of Canterbury.

In 2022, Dr Morrison gave us a fascinating talk regarding the Bridge of Remembrance, not so much on the architecture or history but the story behind its inscriptions, the debates around them.

Come to the bridge and find out about these, and a few of the connections between the bridge and antiquity.

There is a limited to 15 people and afterwards you can share a coffee/meal (venue to be decided and PYO) with Dr Morrison.

If you are interested in going, as there are only a few places left, please let me know at <u>r.fagg@xtra.co.nz</u> by 14th April.

As mentioned earlier, there are limited space left so if you want to come, please let us know.

And don't forget our CO2 monitor you can borrow. It's been in use regularly and don't forget to contact us and we arrange for you to pick it up. A guide to recommended CO2 measurements can be found at https://www.rnz.co.nz/news/in-depth/470690/whose-breath-are-you-breathing.

All we ask in return is that you post your findings on either the branch Facebook page or twitter.

From other branches and RSNZ Te Apārangi

From Royal Society Te Apārangi



Royal Society Te Apārangi will oversee new research fellowships

The Royal Society Te Apārangi has been selected through an open tender process to administer the Aotearoa New Zealand Tāwhia te Mana Research Fellowships.

The Aotearoa New Zealand Tāwhia te Mana Research Fellowships are designed to better support a range of research organisations and talented future research leaders across career stages.

The Royal Society Te Apārangi will be publishing further information for applicants about the Aotearoa New Zealand Tāwhia te Mana Research Fellowships shortly. We expect applications for the Tāwhia Fellowships to open towards the middle of this year. Click here to <u>Learn more</u>

Hawke's Bay Branch of the Royal Society of New Zealand

"Hawke's Bay Scientists on Air" radio broadcasts, which we support, now go to air each second Monday after the 10:00 am news.

Links to articles of interest

From the Conversation

Marine protected areas safeguard more than ecology – they bring economic benefits to fisheries and tourism

Mark John Costello, Nord University Marine protection represents our best

strategy to reverse declining biodiversity. But protected areas also provide a low-tech

and cost-effective way for the fishing industry to safeguard stocks

Click on title to read further.

Climate change is slowing Earth's rotation

Melting ice caps are slowing the rotation of the Earth and could<u>delay the next leap second by three years</u>. Adding or removing seconds every few years keeps official atomic-clock time in line with the natural day, which varies slightly in line with the planet's rotation rate. Since the early 1990s, the flow of water away from Earth's axis of rotation and towards the Equator has worked to slightly slow down its spin. "It's yet another way of



impressing upon people just how big a deal [climate change] is," says geophysicist and study author Duncan Agnew.





Nature | 6 min read

Reference: Nature paper

From European Southern Observatory

Astronomers unveil strong magnetic fields spiraling at the edge of Milky Way's central black hole.

A new image from the Event Horizon Telescope (EHT) collaboration has uncovered strong and organised magnetic fields spiraling from the edge of the supermassive black hole Sagittarius A* (Sgr A*). Seen in polarised light for the first time, this new view of the monster lurking at the heart of the Milky Way galaxy has revealed a magnetic field structure strikingly similar to that of the black hole at the centre of the M87 galaxy, suggesting that strong magnetic fields may be common to all black holes. This similarity also hints toward a hidden jet in Sgr A*. The results were published today in The Astrophysical Journal Letters. The release, images and videos are available on: https://www.eso.org/public/news/eso2406/

You can keep updated by on the branch's Facebook page Canterbury RSNZ Branch or twitter @CanterburyRSNZ.

If have any suggestions for speakers, field trips ideas, or even contribute something in the newsletter please contact us and I am always willing to discuss anything regarding the branch with you.

To end, on behalf of the council, I like to wish you a Merry Christmas and New Year, safe holidays and we will all meet again in the new year.

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