RASNZ 2020 ONLINE CONFERENCE LINKS...

(AFFILIATED SOCIETIES' MEETING, AGM, TALKS, ETC)

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Annual General Meeting - (Saturday 24 October 2020, 3:00pm)

- AGM Agenda
- 2019 AGM Minutes
- Summary of publications received by RASNZ, May 2019 October 2020
- 2019 Financial Report sent to members as an attachment (Google Docs jumble it)

<u>Conference Talks</u> - (Tuesdays: Tues 27 Oct until Tues 1 Dec 2020, 7:30pm – and Thurs 29 October)

ANNUAL GENERAL MEETING (AGM) - Sat 24th October 2020, 3pm - ZOOM Meeting link

AGM AGENDA -

ROYAL ASTRONOMICAL SOCIETY OF NEW ZEALAND

97th Annual General Meeting - Saturday 24th October 2020, commencing at 3 pm

Online AGM - restrictions imposed by the NZ government as a response to the COVID 19 outbreak, having caused the physical conference to be cancelled

A Zoom link will be sent out prior to the meeting.

2020 AGM AGENDA

- 1. Apologies
- 2. Respect for Deceased Members
- **3.** Greetings to Absent Members
- **4.** Minutes of the 96th AGM held in New Plymouth, 2019 available at http://www.rasnz.org.nz/rasnz-minutes and below.
- Matters arising from the minutes
- **6.** Annual Report of Council for 2019 published in March 2020 issue of *Southern Stars*
- 7. Annual Accounts for 2019
- **8.** Election of officers for 2020 2022
- 9. Appointment of Auditor
- **10.** Appointment of Honorary Solicitor
- **11.** Election of a new Fellow of the Society
- **12.** 2021 RASNZ Conference in Nelson ideas and issues re C-19
- **13.** General Business as allowed for in the Rules
- **14.** Close

John Drummond, Executive Secretary

ROYAL ASTRONOMICAL SOCIETY OF NEW ZEALAND

Minutes of the

96th Annual General Meeting held on 18 May, 2019 at The Devon Hotel, New Plymouth

The meeting opened at 4:10pm

Present:

Nicholas Rattenbury (Chair), Jennie McCormick (Acting Secretary), 37 other members and two observers.

The Chair thanked Jennie McCormick for taking the minutes of this meeting in the absence of the Executive Secretary, Gordon Hudson, who was unable to attend due to illness.

The Chair advised that the audio of this meeting would be recorded to help with minute taking. There was no objection.

1. Apologies:

Rory O'Keefe, John Hearnshaw, Ross Dickie, Gordon Hudson, Alan Baldwin, Warwick Kissling, Marilyn Head and Peter Jaquiery

Moved: Nicholas Rattenbury (Chair) "That the apologies be accepted" - carried

A moment of reflection was observed for the victims of the Christchurch Mosque massacre over two months ago.

2. Respect for deceased members:

A moment of silence was observed for the passing of the following members during the year:

Graham Kershaw and Paul Cain.

3. Greetings to Absent Members:

Gerry Gilmore, Tom Richards, Brian Warner, Gordon Hudson, Marilyn Head, Alan Baldwin, Ross Dickie and John Hearnshaw.

Moved: Nicholas Rattenbury / Orlon Peterson "That formal greetings be sent by the Secretary or a RASNZ representative to these members" – carried

4. Approval of Minutes:

The minutes of the 95th AGM held in Christchurch on 5 May, 2018 were read by Nicholas Rattenbury (Chair)

Moved: Gary Sparks / John Drummond "That the minutes of the 95" Annual General Meeting be approved as a true and correct record" – carried.

Moved: Nicholas Rattenbury (Chair) "That an amendment be made. The glued AGM minutes in the minute book from the 95" AGM in Christchurch will be replaced with the corrected version and an

amendment be made to (8c) Junior, Vice President Steve Butler, by removing the word Junior. That the amendment made is an accurate representation of events." - carried

5. Matters arising from the Minutes:

- a) Correction required by Glen Rowe It was recorded that John Talbot was deceased; this was an error. His name should have been recorded as being an "Absent Member."
- b) Bob Evans noted that it was recorded that *Southern Stars* was to be uploaded to ADS (Astronomical Data System). He stated that this is now underway, although there were a few copies missing which he has gathered together and given to Grant Christie.

Grant Christie now has a complete set of Southern Stars from Vol 1, 1934 to March 2019. We hope to have these shipped off to the USA in the next month or so.

The Chair advised that the ADS is a publicly accessible system freely available to anyone, although there will be a 6-month embargo on the *Southern Stars* volumes once they have been uploaded into the ADS. This had been decided on by the RASNZ council as fair and balanced and would not cause the society a membership loss from those who only wanted a RASNZ membership to receive *Southern Stars*.

c) Duncan Hall summarised moving RASNZ from a Tier 3 to Tier 4 charity. It was looked at carefully and he felt it best to leave it as the *status quo*. At present the RASNZ is a Tier 3 charity which means the Society is required to report their accounts as an accrual accounting system. Duncan did not see any benefit at this stage moving to Tier 4. Moving to Tier 4 is costly and would also require rule changes; he felt we should discuss this at a later date.

6. Annual RASNZ Council Report 2018

Nicholas Rattenbury (Chair) advised that the annual report of the RASNZ Council was published in the March 2019 issue of *Southern Stars* (Vol 58/1).

Moved: Gary Sparks / Dennis Goodman "That the Annual Report of the RASNZ Council be received" - carried

7. Treasurer's Accounts 2018:

Duncan Hall spoke to his report and stated he only had 4 copies of the final audited accounts to circulate here today. Unfortunately, he was unable to have the accounts prepared on the accrual basis for publication in the March issue of *Southern Stars* but he did prepare a statement of cash flows which he believed provided an indication of the financial status of the society.

He reported that the society is in a good financial position and that all accounts had been prepared using the Tier 3 accrual.

He was happy to take questions on the audited accounts report before the meeting closed.

Moved: Nicholas Rattenbury (Chair) - "That the Treasurer's 2018 accounts be received" - carried

8. Appointment of Auditor

Moved: Duncan Hall / Steve Butler – "That Ashton Wheelans based in Christchurch be appointed as the RASNZ Auditor for the 2019 year." - Carried

9. Appointment of Honorary Solicitor

Moved: Nicholas Rattenbury (Chair) – "That John McKay be appointed for the 2019 year as the RASNZ Honorary Solicitor." - Carried

10. Nomination of a new Fellow of the Society

Nicholas Rattenbury (Chair) read a proposal for John Drummond of Possum Observatory, Gisborne to be appointed as a RASNZ Fellow. This recommendation was supported by John Hearnshaw, Steve Butler and Alan Gilmore, RASNZ Fellows.

The RASNZ Fellows and the RASNZ Council were in support of this proposal.

Moved: Nicholas Rattenbury (Chair) "That John Drummond be appointed as a Fellow of the RASNZ" – carried by a round of applause

11. Alterations to the Rules of the RASNZ

Alterations to the RASNZ rules were proposed in accordance with Rule 90.

Nicholas Rattenbury (Chair) read the proposed changes. The alterations were proposed by the RASNZ council and were put to a vote in this meeting

a) Rule 26 - to be deleted, as the council no longer requires the Affiliated Societies to supply their reports or publications.

A long discussion took place regarding this with Simon Lowther against the change due to the likelihood of it damaging the RASNZ" brand" through the possible insolvency of a society affiliated to RASNZ.

Moved: Gary Sparks / Orlon Peterson "That Rule 26 be deleted from the RASNZ rules." – carried by majority with 30 yes, 5 opposed and 3 abstentions.

b) Rule 38 – the term "registered letter" to be replaced by "trackable courier".

Moved: Stephen Stewart / Steve Butler "That Rule 38 be amended to replace "registered letter" with "signature required trackable courier" – carried.

c) Rule 43 - the words "and occupations", be deleted from this rule.

Moved: Brian Loader / Dennis Goodman "that the proposed change to Rule 43 be made" – carried.

d) **Rule 49** - Change proposed replacing "two vice presidents" by "a vice president and an immediate past president".

Moved: Jennie McCormick / John Drummond "that the proposed change be made to Rule 49" – carried.

- e) Rules 75, 82, 58, 58a and 58b
 - **Rule 75:** The wording of Rule 75 in the RASNZ Society Rules and By-Laws be changed so that 'one Vice President' reads 'Vice President'.
 - **Rule 82:** The wording of Rule 82 in the RASNZ Rules and By-Laws be amended so that 'a vice-president' reads 'Immediate Past-President'.
 - **Rule 58:** The words 'by electronic means' be deleted from the preamble of Rule 58 and be replaced with 'outside a meeting of Council'.
 - **Rule 58(a):** The words 'telegram, cable, telex message, facsimile,' be deleted from Rule 58(a).

Rule 58(b): Rule 58(b) be amended to read:

(b) Where a resolution is voted on by any means of communication set out in 58(a), above, the name of the Council member voting to the resolution must be included in the message.

Moved: Brian Loader / Stephen Stuart "That the proposed changes to Rules 75, 82, 58, 58a and 58b be made" – carried.

Glen Rowe advised that the new rule changes will be forwarded to the Incorporated Societies / Charities Commission.

He also advised that the RASNZ Council will be revising the RASNZ By-Laws which are Council's responsibility. The Council will advise the members giving them time to comment on the changes. Once this has been done, these too will be submitted to the Incorporated Societies / Charities Commission.

Nicholas Rattenbury (Chair) formally thanked Glen Rowe for bringing these rule changes to the Council's attention for amendment.

He also advised that all the new rule and By-Law changes will be sent out to all members once all the documentation was complete.

12. 2020 RASNZ Conference in Wellington

Nicholas Rattenbury (Chair) asked for a discussion regarding ideas for next year's (2020) Centennial Conference which will be held in Wellington.

Glenn Urquhart suggested inviting a well-known astronomical speaker e.g. Brian Cox. However, the President pointed out that the cost would be extremely high to bring someone like Brian Cox into the country and that may not be value for money.

Glen Rowe stated that RASNZ has been in touch with the Royal Astronomical Society in London and they have agreed to send out an astronomer. That person is yet to be decided upon.

In addition to this, the SCC is looking to have invited speakers and it is possible, two or three astronomers will be invited.

It was decided to continue this discussion in the last session on Sunday where further information on the conference will be presented.

If anyone has any other ideas to please email Nicholas Rattenbury (Chair) or any other RASNZ council member

13. General Business

A. Moved: Duncan Hall / Nalayini Davies "As of today, that Susan Shoebridge be appointed as Society Treasurer." – carried

Nicholas Rattenbury (Chair) formally welcomed Susan Shoebridge onto the RASNZ Council and thanked Duncan Hall for the work he has done over the year.

B. Brian Loader suggested that the RASNZ Council make future conferences available online as this would allow overseas people and others to attend who might otherwise not be able to.

He raised the issue of Climate Change. The cost of carbon emissions incurred getting to conferences was very high and needs looking at urgently. He suggested that the RASNZ Council look at this as a possibility.

Nicholas Rattenbury (Chair) stated he would take these suggestions to the RASNZ Council.

A discussion took place and the Standing Conference Committee (SCC) said they would investigate this further and report back to the membership.

There being no further business the meeting closed at 5:43 pm.

Signed: Nicholas Rattenbury (RASNZ President)

Summary of publications received by RASNZ, May 2019 - October 2020

Organisation	Publication	Issues
Ast Soc of Victoria	Crux	June 2019 – November 2020
		(bi-monthly)
		Handbook for 2020
Canterbury Astronomical Society	CasMag	May 2019 (monthly)
Societie Astronomique de France	L'Astronomie	April 2019 – September 2020
		(monthly)
British Ast Assoc	Journal	June 2019 – August 2020 (bi-
		monthly)
		Handbook for 2020
ESO	CAP Journal	March 2019
Inst de Astronomia Universidad Nacional	Revista Mexicana de Astronomia	April, October 2019
Autonoma de Mexico	y Astrofisica	
	Serie de Conferencias	

From Glen Rowe, 15 Oct 2020

2020 ONLINE CONFERENCE TALKS -

2020 RASNZ On-Line Conference Presentations

Here is the schedule of talks that have been arranged for the 2020 on-line RASNZ Conference. For abstracts and any last-minute changes please check out the RASNZ website (www.rasnz.org.nz).

The talks will be streamed via RASNZ's YouTube channel. Please go to -

https://www.youtube.com/channel/UCjE5Y-Eg2fkrfofBkDt3 EQ and subscribe to RASNZ's channel. The only software you will need to watch these presentations is a web browser pointed to the RASNZ channel where all talks will be made available for later viewing.

2020 RASNZ On-Line Conference Programme



To be streamed via RASNZ's YouTube Channel: https://www.youtube.com/channel/UCjE5Y-Eg2fkrfofBkDt3_EQ

Tuesday 27 October, 7:30 pm

Katie Bouman
Imaging a black hole with the Event Horizon
Telescope

A recording of 2019 public talk at Caltech, used with Katie Bouman's permission. 60 min.



Thursday 29 October, 7:30 pm

Rene Breton

Einstein's Relativity: tested to the limit with pulsars A recording of 2018 public talk to the RAS London, used with Rene Breton's permission. 60 min.



Tuesday 3 November, 7:30 pm

Nick Rattenbury

Te Pūnaha Ātea Auckland Space Institute (20 min)

I present Te Pūnaha Ātea Auckland Space Institute, a new Centre at The University of Auckland. I will give an overview of our research including in-orbit operations for space situational awareness, debris monitoring and removal, educational programmes, and our research in orbit planet detection via the NASA/GFSC RamJET project. I will give a summary of the satellite missions developed from the Auckland Programme for Space Systems. I will also present Te Pūnaha Ātea Auckland Space Institute research supporting a mission to the upper atmosphere of Venus, with a goal of detecting extremophile life.

Tom Love

Chasing rainbows: spectroscopy with small telescopes (20 min) Recent years have seen the emergence of off the shelf equipment and software that make it possible to carry out a range of useful spectroscopic observations with amateur scale telescopes. This paper briefly describes some of the available equipment and techniques, gives examples of spectroscopic observations being made by amateur astronomers around the world, and describes some of the resources available to support those who want to try such observations.

Shaun Hotchkiss

The non-linear Schrodinger equation in cosmology (20 min, pre-recorded) The non-linear Schrodinger equation shows up in many places in cosmology. This includes "fuzzy dark matter", "axion stars" and a potential period of early matter domination right after inflation.

I will talk about why this equation is so ubiquitous and the interesting new phenomena that arise when it is relevant. This includes the formation of solitonic structures and smoothing out of sharp cusps at the centre of gravitationally bound structures, and the formation of granular blobs in those structures' outskirts.

Tuesday 10 November, 7:30 pm

Heloise Stevance

How old is Matariki? (30 min)

The age of Matariki (a.ka. the Pleiades), has previously been found to be around 100 million years old, but could it be older than that? In order to determine the age of a star cluster, astronomers rely on theoretical models of stellar evolution and compare

those to current observations. In the past couple of decades, binary interactions have been shown to play a crucial role in how stars live and how they grow old. However, the age of most star clusters (including Matariki) has been inferred by using single stars only! Our team has set out to change that with a new tool called AgeWizard, and it seems that the Seven Sisters might be older than we previously thought.

Steve Butler

Measuring the night (20 min)

Tuesday 17 November, 7:30 pm

Nick Rattenbury

The Kerr-Tinsley Centre of Research Excellence (20 min)

I present here a summary of the application made by NZ academic astronomers for funding the Kerr-Tinsley Centre of Research Excellence. The CoRE application has five themes, extending from cosmological research, through stellar population, computational astrophysics to proposing New Zealand's first space telescope mission.

Ed Budding

Collaborative studies of southern close binary systems: a progress report (20 min)

A programme of studies of southern eclipsing binary stars, underway during the last decade has involved spectroscopic observations at the University of Canterbury's Mt John Observatory, photometric data from the RASNZ-VSS and various other international resources available on internet, together with appropriate software development. Examples of facilities and materials used are shown, together with

some recent results. Absolute stellar parameters derived from these studies allow insights into a number of topics in stellar formation and evolution.

Petra Nianqi Tang

Estimating spectral density for the stochastic gravitational wave background for LISA (20 min, pre-recorded)

Tuesday 24 November, 7:30 pm

JJ Eldridge

Understanding the stars that create gravitational wave transients (30 min, pre recorded)

Max Briel

Observing transients in a simulated universe (30 min)

Transients are short, on an astronomical timescale, duration events compared to the evolution of galaxies and stars. Gravitational wave events and supernovae are two main types of transients. Supernovae - the explosion at the end of a star's life - have been measured for centuries, but gravitational waves from the merger of two compact objects were measured for the first time in 2016. The rate of both of these events relate to the number of stars being formed over the history of the Universe and the evolution of binary star systems. Using stellar population synthesis and cosmological simulation of the universe, we predict the number of transients taking place in a synthetic universe, similar to ours, and discuss what they tell us about the evolution of binaries.

Tuesday 1 December, 7:30 pm

John Hearnshaw

New Zealand's progress towards becoming a dark-sky nation (30 min)

John Drummond

Murray Geddes, an assiduous NZ observer of meteors, sunspots and variable stars - as well as aurora and comets (20 min)

Murray Geddes was described as 'an assiduous observer of meteors, sunspots and variable stars'. In addition, Geddes discovered a comet in 1932. He also developed a deep interest in aurora which led to an international collaboration with professional astronomers and significant contributions to the understanding of aurora. Unfortunately for the astronomical community (and others) his life was cut short when aged 35 during WW2. The RASNZ honours this New Zealand man's achievements with the lecture fund named after him.