

Chair's Notes - IAA SETI Committee Meeting - IAC 2024

Date: October 16, 2024

Time: 10:00 - 13:00 (GMT+2)

Location: MICO Convention Centre, Amber Hall 4, Milan (with Zoom participation)

Chair: Michael A. Garrett

Welcome & chair's report

- Chair, Michael Garrett, opened the meeting by welcoming attendees, both in-person and remote. Around 35 people attended in-person and 10 online. The chair's notes from the previous IAC 2023 meeting were noted: https://www.dropbox.com/scl/fi/0d96ua8ruajgvcxygpq1p/1_IAA-SETI-Committee-meeting-IAC-2023-notes-from-the-chair..pdf?rlkey=i5ckwxqd77jhhm4z7hsjjgax6&dl=0

In Memoriam

- Bill Diamond honoured the memory of Jack Welch (1934-2024), recognising his significant contributions to the Allen Telescope Array (ATA), the broader SETI field, and radio astronomy as a whole. Following the tribute, moments of silence was observed.

Chair's Report

- Michael Garrett presented updates on recent and upcoming events (see: https://www.dropbox.com/scl/fi/fsrmd86u2674ttuxwnq5z/2_IAA_SC_Chairs_report_IAC_2024.pdf?rlkey=wlk0e3iv4dndc5ztm8mcftwde&dl=0). The SETI Sessions at IAC 2024 had been very well attended with 100 participants each. ESA astronaut Andre Kuiper attended both sessions. The SETI Committee is still awaiting new ToRs in order for new members to be appointed. Membership harmonisation - some outstanding issues remain. Steve Croft, Daniela de Paulis and Vishal Gijjar were recently elected as IAA Corresponding Members - see chair's reports for photos.. Steve and Vishal now also serve as co-editors for Acta Astronautica.
- Elisabeth Potelat pointed out that the full Acta editorial board was presented at: <https://www.sciencedirect.com/journal/acta-astronautica/about/editorial-board> and that SETI papers are among the most downloaded.
- The SETI Committee was well represented at the IAA Academy Dinner - we should try and maintain a strong presence at these events and the Academy day itself.

Upcoming SETI Events

- Key upcoming events were outlined:
 - IAC 2025, Sydney, 29 Sep - 3 Oct 2025
 - SKA Science Case Meeting, June 2025

- Penn State SETI Symposium, 18-21 Aug 2025 - it was noted that this meeting included "Breakout Sessions" where participants focussed on various key issues - in recent times these have included Post-detection activities. Breakout sessions can still be proposed for the 2025 meeting. Potential participants can register their interest in getting updates about attending the SETI Symposium at Penn State with this form: <https://docs.google.com/forms/d/e/1FAIpQLScJH65bq1ktz0uu0xpQsLzUgNSrOq1Orgl9vhHmsrDA8hq0EA/viewform>

SETI Developments

- Andrea Mellis: provided updates on SETI activities at the Sardinia Radio Telescope, highlighting the recent success of the SETI Italia meeting held the previous week, which generated strong interest across all levels at INAF. It was suggested that organising similar "side meetings" at future IAC events, such as in Sydney 2025, would also be beneficial.
- Jamie Drew: Progress and evolution of the various Breakthrough Initiatives were presented, including Breakthrough Watch. It was hoped that the Breakthrough Discuss event would shift back towards its original April scheduling next year, in Oxford. Sadly, it was reported that Prof. Ian Shipsey (HoD Oxford) had suddenly passed away - Ian had been instrumental in the move of Breakthrough Listen HQ activities to Oxford.
- Bill Diamond: Shared several exciting updates from the SETI Institute. The first institute awards supporting early career researchers would be announced soon.
- Tong-Jie Zhang: Overview of SETI activities at FAST - the high sensitivity of the telescope makes it an attractive facility for SETI - leakage radiation from nearby stellar systems is well within current detection levels. International participation is encouraged.
- Robert Blumenschine: presented his work at PAST (Palaeontological Scientific Trust) in South Africa - this has strong overlap with technosignature research - there was discussion on how to build on these connections between the Palaeontology and SETI communities - ideas about a more integrated programme at the Life in the Universe (LITU) meeting, student exchanges and related joint workshops/field trips were aired.
- Takalani Nemaungani (Dept. of Science & Innovation, Chief Director for the Astronomy portfolio) presented the growth of SETI in South Africa and the extremely good collaboration enjoyed between the MeerKAT team and Breakthrough Listen. DSI was excited with the progress being made.
- Jason Wright: shared details on PSETI's latest research and upcoming

initiatives, in addition to the PSETI 2025 meeting discussed above. PSETI is also supporting the activities of the "Order of the Octopus", including a recent meeting at Green Bank attended by many ECR SETI researchers. The <https://seti.news/> resource that lists SETI papers was also highlighted - this is a very useful resource for keeping up with the literature.

There was a discussion about the history of our field. Committee member Steve Dick, former NASA chief historian, has written an essential history of the quest for ETI. Gabriela Radulescu was at the meeting - her PhD thesis will be published soon. Kathryn Denning noted that Rebecca Charbonneau is an early career historian focused on SETI, now at the American Institute of Physics. Rebecca has a book coming out soon.

Post-Detection Developments

- Kathryn Denning presented a comprehensive report on post-detection activities around the world, including the activities of the SETI Hub at St. Andrews UK, the IAU/Kavli Symposium, and the IISL WG on SETI and Law. Her report and a recording of her presentation is available at: https://www.dropbox.com/scl/fi/p40qozvzmpccex0uiax1l/3_IAA-SETI-Committee-2024-PostDetection-report-K-Denning-11-Oct-2024.pdf?rlkey=p06ea7cbgg09d3hasmvligaf4&dl=0 and
- <https://www.dropbox.com/scl/fi/i7sgedswhnl4svbljd1bd/Denning-IAA-SETI-Comm-PD-report-15-Oct-2024-with-recording-whole-thing.pptx?rlkey=at9b8vwqzereapc1061u3o79s&dl=0>

New IAA SETI Committee Post-Detection Protocol Document

- Les Tennen introduced the new 2024 Post-Detection Protocol draft - Tennen, Denning, Oliver & Garrett (presented as a paper at IAC Session A4.2). Members of the exec (Siemion & Walton) had also contributed to the text. The key updates included revised principles regarding data sharing, ethical responsibilities, and communication guidelines. A comparison of the new 2024 version with the previous 2010 version is available at: https://www.dropbox.com/scl/fi/hl3qk0zhd7bwbeexhycm/5_Protocols-comparison-2010-and-Oct-2024-Draft.pdf?rlkey=bhd59c73elvpgykyloufezvkvx&dl=0. The presentation is at: <https://www.dropbox.com/scl/fi/fcfzeklm09g62b11up99v/Tennen-et-al-IAC-24-A4.2.6-x84417.ppt?rlkey=frn2ri99cxysiytma4f4uxsl9&dl=0>
- Feedback was sought from committee members:

The members were very pleased to see progress being made.

One issue was whether individuals or institutes should actually sign the document - there was a general feeling in the room that this might not be

appropriate/realistic.

Related to this point was the suggestion that the document should not be too prescriptive - it was more a description of best practice that would guide researchers/institutes in the event of a detection.

There was discussion about how to disseminate the final version of the PDPs beyond the SETI Community. The goal was to go public at IAC 2025. We could learn a lot from the outreach preparations that accompanied the "Sign in Space" project. The IAA can also support this.

The PDP document could be seen as part of a package of living documents that were related and supportive of each other - these would need to evolve over time in an ever-changing landscape. Adding references to the PDP document might be considered.

Martin Dominik noted that in terms of getting the final document visibility at the UN, he has a link with the Scientific Advisory Board of the UN Secretary-General through the Global Young Academy, which is an official network partner. One of the topics they are currently interested in is "Outer Space", and an expert group is being set up. I can also facilitate links with the International Network for Government Science Advice (INGSA), in case this is also useful.

The draft will undergo further refinement over the coming 12 months.

PDP Consultation Process

- Michael Garrett outlined the way forward in terms of getting feedback on the PDP revision and feedback process, emphasising the multi-stage consultation approach and the goal to present the final draft to the members by mid-2025. The first stage is to seek feedback from the membership of this committee - we can accept comment by either email or via a google form - the latter will ask for feedback on specific aspects of the PDP but will also provide an opportunity for general comments to be made. We are looking to make both feedback mechanisms anonymous. In this phase, we may also approach Breakthrough Listen and the SETI Institute for comment as major SETI organisations. This first phase of feedback will be distilled and fed back to the PDP drafting team - an updated version of the PDPs will be generated early next year. In the second phase, this new version of the PDPs will be circulated to the broader SETI community - in this process we will take advantage of the community email distribution list, as well as other contacts. The same anonymous email and google form tools will be used. Again, the feedback would be used to generate a final PDP document to be presented to the membership in a special (online) meeting of the committee in mid-2025. An online vote would then take place thereafter and would be open for several

days. Approval of the PDPs would be via a simple majority of the votes cast. The full process was presented in: https://www.dropbox.com/scl/fi/0bfa77ss2spxhqavlj8as/6_IAA_SC_PDP_Process.pdf?rlkey=0v42z2iz9ysi1dr7khevwhk4b&dl=0

- AOB - No additional items were raised by attendees. The meeting concluded at ~ 13:05 with a group photo (see below).



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