

SETI PC Meeting Notes

IAC 2017 Adelaide

26 September 2017.

Attending: Claudio Maccone (CM), Michael Garrett (MAG), Carol Oliver (CO), Andrew Siemion (AS). Vladimir Philippov, Nicolo Antonietti, Alexander Panov, Duncan Forgan (DF), Ian Morrison, Daniel Price, John Rummel, Emilio Enriquez, Andrea Melis, Robert Debiase, Morris Jones, Nelly ben Hayoun (NbH).

Attending remotely: John Elliot (JE), Eric Korpela, Martin Dominick, Paul Shuch, David Deboer. Elizabeth Piotelat, Steve Croft, Denise Herzing (DH), Dan Werthimer, Katherine Denning, Les Tennen, Ivan Almar.

Apologies received from Leonid Gurvits (co-vice chair).

1. Welcome

Welcome by the Chair, Claudio Maccone, CM noted this was the first time that the SETI PC would meet not only f2f but also via video conference technology (thanks to Andrew Siemion and the Breakthrough Listen (hereafter BL) team for making this possible). A tour of the table followed, MAG (co-vice chair) congratulated CM on his re-appointment as PC chair.

2. Minutes of SETI PC Mexico 2016

The minutes were read aloud at the meeting by MAG.

The following action items have been completed:

- SETI session at COSPAR organized (AS/CM)
- SETI PC website transferred to new site managed by BL (AS).
- SETI PC Mailing list created (DH/AS)

Minutes of Mexico 2016 were unanimously approved.

3. Report from PC chair

Comments requested on frequency of future teleconferences and

Action Item: DH to organize quarterly SETI PC meetings.

4. Rio Scale

Ivan Almar and Duncan Forgan gave presentations on Rio 2.0.

The new scale is available online: <https://dh4gan.github.io/rioscale2>

The new scale will be advertised via various SETI related social media sites (e.g. BL) etc. Will need a concerted effort to raise the scale's profile. JE noted that we need to see how this connects to post-detection issues e.g. communications with media/general public etc.

Action Item: DF and JE to get together to consider how Rio 2.0 connects with post-detection activities.

Action Item: AS to circulate the presentation to PC members.

5. China's new FAST 500-metre radio telescope

Presentation made by Lei Qian. Science programme includes SETI, in addition to Pulsars, HI surveys, VLBI etc. 19-beam receiver will be available (built by CSIRO).

Action Item: AS to circulate the presentation to PC members.

6. SETI Protocols

Presentation made by Les Tennen.

Important to restart work in this area.

Action Item: AS to circulate LT's presentation to the membership

Action Item: LT and DF to generate a 2018 update of the Protocols to be presented to the SETI PC for approval at their next meeting of the IAC 2018.

7. Millimetron

Presentation by Alexander Panov on behalf of N. Kardashev. Science programme of Millimetron includes various aspects important for SETI research. Millimetron will operate at 20-300 micrometres and will be 100x more sensitive than Herschel. Slope of BB curve can distinguish between natural and artificial (e.g. cold astro-engineering structures) phenomena. Organic molecules (incl. prebiotic) can also be detected. Traditional communications SETI will also be possible e.g. around optimal/magic frequencies e.g. 1.5mm. VLBI is also foreseen, incl. ALMA.

Action Item: AS to circulate the presentation to PC members.

8. SKA

AS and MAG reported that SKA continues to make good progress, and BL is engaged in employing SKA precursors for commensal SETI surveys (e.g. MeerKAT). SKA HQ expanding at the host site – Jodrell Bank Observatory.

ngVLA is also making progress and is looking towards being included in the next decadal report – BL has good connections with all of these problems. Important to make sure that SETI is not designed out of these new (radio) facilities. CM noted the applicability of the KLT to some of these activities.

9. Moon Farside protection

CM made a brief presentation - worries about space tourism expressed. IAA Cosmic Study 1.6 completed - hope is to publish and distributed soon, also reaching out to related entities e.g. Int. Space Law Institute.

10. Recent SETI related meetings.

Kerastari meeting held this year and included SETI research – wide ranging discussions, sitting alongside other topics such as radio transients.

UK SETI research network – annual meetings well attended – 2017 meeting was held in Manchester organized by JE and MAG.

Italian SETI meeting 2017 – a particular interest for SETI researchers is the possibility use the CTA as a SETI instrument.

11. Upcoming SETI related meetings.

COSPAR 2018, July 14-22, in Pasadena: we will have a full one-day event for SETI: <http://www.jpl.nasa.gov/news/news.php?feature=4390> (AS & CM).

Prospects for the 2018 IAC in Bremen, Germany, October 1-5, 2018 (CM). CO noted that there have been few educational papers in recent times. Some aspects of SETI education and outreach in session E1.9

Action item: CO will engage with session E1.9 chairs NbH in order to ensure these matters are properly coordinated in future.

Astrobiology meeting New Zealand 25-26 June 2018

USNW Sydney bidding to host Bioastronomy meeting in August 10-13, 2020 – would include a significant SETI component. Field trip to WA will be organized.

Paris: Spring Meetings, March 26-29, 2018.

General points - Astrobiology meetings – important SETI is presented at these meetings – signs that views on SETI are changing in AB community – becoming more positive.

Interstellar Flight, Big History, by those interested, with just a few minutes.
12:30

12. New members

New members approved: Lei Qian, Jean-Luc Margot, Nicolò Antonietti (nominated by Claudio Maccone), Nelly ben Hayoun (nominated by Michael Garrett), Griffin Foster, Duncan Forgan, Jacob Haqq-Misra, Steve Croft, Vishalkumar Rasiklal Gajjar, Greg Helibourg, Beatriz Villarroel Rodriguez, Bill Diamond, David DeBoer (nominated by Andrew Siemion) Danny Price (nominated by Emilio Enriquez) .

New appointments are for 2 years and are not automatically renewable – members must contribute to the PC's activities.

Action item: the PC will review its membership at each meeting. This activity will be scheduled as a standing item on PC agendas (CM).

Action Item: the PC will review the process for appointing and re-appointing members at its next meeting.

13. AOB

Action Item: CM will ensure that the SETI PC agenda is ordered such that items of committee business are placed towards the top of the agenda, ensuring that there is sufficient time to discuss key decisions e.g. membership.

SETI dinner this week – Wednesday 7.30pm at the Red Ochre restaurant
<http://www.redochre.com.au>

Notes by MAG 26-Sep-2017