

# SCAR AAA

## Tasks for today



John Storey, Chief Officer, AAA



# Work program

## Our two tasks for this weekend:

- Write the astronomy & astrophysics submission to the “*Practical Guide to Enabling the 20-Year Antarctic Science*” roadmap.
- Decide how SCAR AAA should evolve over the next four years.



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## Three goals to emerge from Auckland, 2014:

1. Create an Antarctic Plateau International Astronomical Observatory (APIAO),
2. Extend the current site testing searchable database to become a data portal,
3. Increase outreach activities directed towards the general public and the international astronomical community, especially in those countries with less developed astronomical programs in Antarctica.



Some other suggestions are as follows:

- Bi-annual workshop (in place)
- Travel grants to attend meetings (in place)
- Promotion of your project/results
- Logistical help such as getting your instrument to Antarctica or moving your instrument from one base to another
- Thesis awards/competition
- How to apply for funding of your project
- Database of Antarctic researchers and area



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## Which leads to the current list:

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- Promotion of your project/results
- More visits
- More meetings
- Travel grants for students to conferences
- Promoting particular projects (eg BLAST-TNG) to help find collaborators.
- Group to look at diesel engine pollution
- Support an international KISS user needs meeting
- Workshop for inter-project discussion (Gattini-IR)
- Provide guidance for future relocation eg Gattini-IR to Ridge A.
- Working group to evaluate 20 m optical/nIR telescope for Antarctica? (Guyon)
- Look at engineered ice
- Promoting photonic technologies (Nem)
- Meetings such as this that facilitate networking are the most important.





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# Scientific Committee on Antarctic Research **astronomy & Astrophysics from Antarctica (AAA)**

## **Timeline:**

- 2006 Planning Group proposed; Hobart, Australia
- 2008 AAA SRP approved; Moscow, Russia
- 2009 First Planning Group meeting; Frascati, Italy
- 2009 Second Planning Group meeting; Rio de Janeiro, Brazil
- 2010 Business meeting of AAA SRP; Buenos Aires, Argentina
- 2011 Kick-off workshop; Sydney, Australia
- 2012 Business meeting; Portland, Oregon
- 2013 Second workshop; Certosa di Pontignano Siena, Italy
- 2014 Business meeting; Auckland, New Zealand
- 2015 This meeting; Volcano, Hawaii**
- 2016 Business meeting; Kuala Lumpur, Malaysia
- 2017 Fourth workshop; where?



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# Infrastructure and technology needs

## (suggestions from this meeting)

- APIAO
- Development of low pollution power sources in 1 – 20 kW range
- 20 m optical/nIR for Antarctica?
- Engineered ice for towers and other structures?
- Continued development of low power cryocoolers, improved detectors (sensitivity and stability) at  $> 1\text{THz}$
- Group to look at diesel engine pollution
- Working group to evaluate 20 m optical/nIR telescope for Antarctica?
- Look at engineered ice
- Promoting photonic technologies

# Horizon Scan questions

- *Question 69:* What happened in the first second after the Universe began?
- *Question 70:* What is the nature of the dark Universe and how is it affecting us?
- *Question 47:* How do subglacial systems inform models for the development of life on Earth and elsewhere?