

Roberto Abraham

From: Bryan Gaensler <bgaensler@dunlap.utoronto.ca>
Sent: September 12, 2016 3:06 PM
To: Sills, Alison; Roberto Abraham
Subject: Re: Drafts of feedback for the fundamental science review

Hi Alison,

Here are the bullet points of what needs to be said about SKA:

- * Excellence in fundamental research requires multiple tiers of funding: individuals, institutional/national teams, and major international collaborations/mega-facilities. The first is covered by NSERC Discovery, and the second by CFREF and CFI. However, Canada lacks a consistent and coherent mechanism for participating in the third.
- * We have had varied success in participating in large physics experiments like LHC, LIGO, TMT and SKA, but each solution is bespoke, and seems to depend on happenstance conversations held in airport lounges.
- * The governments in the US, Australia, EU and others have defined competitive mechanisms for getting funding and Cabinet-level support for billion-dollar class international projects. We do not.
- * Astronomy is at the phase where all the major new initiatives are billion-dollar international-class projects. We are thus perhaps the canary in the coalmine for a whole range of other fields who are soon going to run into this issue too.
- * Decadal Plans are necessary to build critical mass and to be internationally competitive. Some disciplines in Canada are writing these, but who is the audience? Who can work with us to implement the priorities in these plans?
- * There is a catch-22 between the NRC's parliamentary mandate to facilitate international access to astronomy experiments and the NRC's inability to lobby government to begin negotiations or to join treaties. Every time this comes up, we need to find a customised solution, and this isn't always successful.

Because of all these issues, we are unable to progress our desired participation in the SKA.

cheers
Bryan