

LRPIC report to CASCA November 2017

Core members - M. Balogh* (Waterloo), M. Dobbs* (McGill), S. Ellison (UVIC), J. Hutchings (Chair) (NRC Herzberg), JJ Kavelaars (CADAC), B. McNamara (Waterloo), N. Murray (U Toronto), I. Stairs (UBC).

Observers - C. Wilson (McMaster U: CASCA past-president), J. Willis (UVIC: GAC chair), J. Rowe (Bishops U: JCSA chair), R. Thacker (St Mary's U: MTRP chair), R. Abraham (U Toronto: CASCA president), G. Fahlman (NRC)

This report notes LRP projects and issues as they have evolved over the past months. The GAC, CATAC, and JCSA reports contain more detailed accounts of individual facilities in the LRP.

The committee has met by monthly telecons, and has continued to conduct ongoing discussions by email. During the past 6 months, the GAC and JCSA chairs have changed, and we thank C Heinke and M. Sawicki for their useful participation. The chairs of GAC and JCSA are active in all discussions.

The LRPIC submitted a further letter to the Space Advisory Board to follow up on the input noted in our last report. This was acknowledged by the SAB, with no further discussion. Hutchings has met personally with one SAB member who is at UVIC, and had a favourable impression of their interests and concerns. LRPIC has kept in touch with Coalition discussions and lobbying efforts with the government. In particular we look forward to hearing about a meeting with the new science advisor, expected in January.

At present the CSA has no clear science policy, the government has yet to issue its promised space policy, and consequently much initiative in recent months has been taken strongly by the aerospace industry, who have little specific interest in science. We are concerned that our message regarding the lack of a clear future in space astronomy is not being heard. We also note with concern that in the meantime CSA has to pursue funding for individual missions (currently WFIRST participation) with specific and individual requests to the government, and continues funding only design and technology studies within its own budget. We note that Canadians are involved in a number of proposed future space missions

(SPICA, LiteBIRD, Athena, Lynx) as well as moving the Canadian-led CASTOR project towards realization.

The CATAAC held a major webex meeting with TMT personnel regarding construction plans. LRPIC follows the Mauna Kea site developments closely and stands ready to support funding and schedule problems that may arise. We note that much design work continues on the Canadian side, as described in more detail in the GAC and CATAAC reports. LRPIC has established an LRPIC-discuss mailing list which is getting good use for discussions among the entire community.

An important meeting on the future of radio-frequency facilities was held in September at McGill, which included considerable discussion on LRP priorities, and those that should be in LRP2020. A number of open discussions focussed on these, with LRPIC participation and input. The LRPIC feels that such a meeting on OIR facilities would be a valuable forum prior to LRP2020, and in considering our upcoming Gemini commitment, and Subaru options. We also commend a similar workshop on space astronomy with the support of CSA. These events should occur within the next year.

The SKA continues with significant preparation and design work, and precursor facilities in South Africa and Australia are entering science operations. Within Canada, an ngVLA mailing list has been established for communications on that project.

LRPIC has recommended to CASCA not to begin the LRP2020 'early', given major uncertainties in TMT, SKA and space funding, as well as the advantage of paying attention to what the US decadal panel recommends. While Canada continues to play significant roles in all major LRP projects, the lack of committed funding to see them to completion and operation is the major challenge for the next few years. A detailed list of LRP2020 recommendations has been drafted, for CASCA board's consideration.