RE: Chair's Report for the Joint Committee on Space Astronomy

Dear CASCA,

This JCSA chair's report covers the period from the last CASCA meeting up to May 2009. The committee met a couple times by telephone and twice in person during this period (May 2008 at the CASCA meeting in Victoria and November 2008 at CSA). The next meeting will take place May 25,26 2009 at the CASCA meeting in Toronto. In this letter I highlight the issues that I feel are most important. A complete summary of the JCSA's recommendations in this period is provided in the attached Recommendations documents from the two JCSA meetings held in this period.

This period has been a good one for space astronomy, highlighted by the publication of important new results from the BLAST stratospheric balloon and the launch of two missions with important Canadian contributions, Planck and Herschel.

The appointment of a new, presumably long term, CSA President is a welcome development. Steve Maclean has made it clear that he intends to champion positive change within the agency, including a much closer working relationship with Universities, an enhanced Grants and Contributions program, and a possible renewal of Canada's launch capabilities for balloon payloads and possibility nano-satellites, which has been identified as an excellent vehicle for training new HQP. The agency appears to be embracing the NASA-inspired goal of 'The Moon, Mars and Beyond'. This will inevitably place a larger fraction of CSA's emphasis on manned and robotic exploration. This is not necessarily bad for space astronomy, as it may lead to an expansion of the CSA's overall budget, as has already been the case in this year's federal budget. CSA interprets space astronomy as filling the role of 'Beyond' and it is in the space astronomy community's best interest to link the science of space astronomy with exploration.

The JCSA has **strongly endorsed the refurbishment of the Grants and Contributions program** and feels this funding vehicle should be greatly enhanced, even in a flat overall funding scenario. This means stronger support for university research and that many programs formerly supported as government contracts (like small missions) will in future be supported by contributions or grants—the JCSA has been advocating this for a long time. Within the G&C program, the JCSA has strongly advocated for an enhanced SSEP program to capitalize on the science return from existing missions and a prestigious fellowships program.

We are pleased to see the **JWST project appears to be back on track**, and that the de-scoping of the Canadian science instrument contribution, the Tunable Filter Imager, has been avoided. We have commended all parties involved on this achievement and look forward to a wealth of excellent science from JWST.

The **Small Missions AO cancellation** has been the low point of the year. This affects three space astronomy missions, BRITE, EBEX, and SPIDER, that were told they were recommended for funding in this program.

Since, in addition to being the Chair of the JCSA, I am also the PI for one of the affected missions (EBEX), this issue has been addressed by a sub-committee that excluded myself and JCSA member Mark Halpern, who is a co-I for SPIDER. The sub-committee, with Robert Rutledge as acting chair, produced a report that has been circulated. Since then, there have been two important developments. In December 2008 Steve Maclean wrote a letter to CASCA president Paul Hickson, wherein he addressed the SMAO cancellation directly and stated that the CSA is working to provide funding for the projects and to address the more important longer term issue of providing a stable, fair, and transparent process for identifying and funding excellence in space sciences in a timely manner that allows our scientists and industry to be competitive on the world scene. With regards to the mission funding, the lowest cost mission of the three, EBEX, has been granted about 2/3 of the SMAO funding amount under the SSEP program. The other two missions were too costly to be funded through the SSEP program, which is capped at \$500K. SPIDER has been provided with a small fraction (~5%) of the SMAO funding amount through a grant for technology development under the SSEP program as a temporary solution. SPIDER and BRITE are awaiting a new invitation to submit unsolicited proposals that is anticipated to happen sometime this summer. This remains a major issue for CSA and JCSA.

The CSA plans to submit its new Long Term Space Plan (LTSP) to government within 6 months. Space astronomy's role (interpreted within CSA's LTSP theme as "exploration of the cosmos beyond the moon and mars") should be prominently featured—the JCSA, together with the CASCA community, will be working hard to ensure this is the case. Unfortunately the LTSP time scale is not well timed with respect to the Long Range Plan, which is just getting under way now. CSA has requested input from the JCSA for the Space Astronomy portion of the LTSP. It is important to note that the LTSP is a government planning document being requested on a government timescale. It is not a community roadmap. The astronomy community has invested considerable effort in the five astronomy related CSA-funded Discipline Working Groups (DWGs), which submitted their final reports 2 months ago. These reports will provide valuable input for the LTSP. The JCSA welcomes input from the CASCA board regarding the organization of this planning effort—defining a strong path forward for the next decade in space astronomy will be difficult without presupposing (to some extent) the outcome of the LRP. The LTSP will be discussed at the upcoming JCSA meeting (May 25, 26) and two of the DWG chairs, Vicky Kaspi and Michel Fich, have agreed to organize and convene a meeting of the DWGs which will also take place at CASCA.

The JCSA received one new member during this period. The voting members are:

- Matt Dobbs (Chair) Term 2006-2009 (outgoing after November 2009 meeting) Department of Physics, McGill University
- **Roberto Abraham** Term 2008-2011 Dept of Astronomy, University of Toronto
- **René Doyon** Term 2006-2009 (outgoing member after May 2009 meeting) Department of Physics, Université de Montréal
- Mark Halpern Term 2006-2009 (outgoing member after May 2009 meeting) Department of Physics and Astronomy, University of British Columbia
- **Robert Rutledge** Term 2007-2010 Department of Physics, McGill University
- Ludovic van Waerbeke Term 2007-2010
 Department of Physics and Astronomy, University of British Columbia

Since the upcoming meeting marks the end of my 2 years as chair, I wish to highlight how much of a pleasure it has been to work with the other JCSA committee members and CSA staff during this period. CASCA presidents Peter Martin and Paul Hickson deserve a pat on the back as well for perfect attendance at (and meaningful insight during) the meetings.

Sincerely,

Prof. Matt Dobbs McGill.ca
Department of Physics, McGill University