

JOINT COMMITTEE ON SPACE ASTRONOMY (JCSA)

REPORT FOR 2004/05 (Submitted by Douglas Scott, 6 May 2005)

JCSA meets twice a year, once around the time of CASCA and once in Nov/Dec in St. Hubert. **This report is mainly a summary of discussions at the December 2004 meeting.**

Committee Members: Douglas Scott (Chair, UBC), Carmelle Robert (Laval), Samar Safi-Harb (Manitoba), David Naylor (Lethbridge) and Barth Netterfield (UofT).

Paul Charbonneau (UdeM) and Marten van Kerkwijk (UofT) are new members who will attend the next meeting. Jaymie Matthews (UBC) and Tony Moffatt (UdeM) have recently rotated off.

Ex-officio members are: Alain Berinstain (CSA), David Kendall (CSA), Kate Wilson (NSERC), Greg Fahlman (HIA/NRC) and Jim Hesser (CASCA).

Current membership can be seen via the CASCA web page.

GENERAL ITEMS

There continues to be an issue of maintaining the profile of Space Astronomy projects in Astronomy planning exercises. It was felt that closer communication between CASCA and CSA is desirable.

The CSA has been engaged in internal strategic planning exercises, involving 4 major thrusts: Earth Observation; Space Science and Exploration; Satellite Communication; and Outreach. It is unclear precisely what impact this exercise will have on Space Astronomy, but this requires continued attention.

The CSA Fellowship Program was announced (across all areas of Space Science) and 2 fellows will probably be appointed in 2005. There were only 8 applicants, although 4 were related to space astronomy. Douglas Scott is on the Selection Committee.

Relevant news from NSERC is that there is a Big Science document which will be circulated to the community and which may be significant for space astronomy projects with large teams.

There is a new CSA Terms of Reference document for the JCSA (in line with similar documents for the other advisory committees).

There was a reminder that the CSA can support small space-related conferences, but applications have to be made at least 5 months in advance.

Denis Laurin has joined CSA Space Science as Senior Scientist, Space Astronomy and Planetary Exploration, and should in future be a significant point of contact for astronomers. He will also be a new ex-officio member of the JCSA.

There was some discussion of what had been learned from the ODIN mission, both scientifically and in terms of planning for future projects.

(more)

OPERATING PROJECTS

BLAST: the test flight in 2003 was of mixed success, but the equipment was recovered with very little damage. The team are preparing for the first long-duration flight from Sweden to Canada in May or June 2005. An impressive number of Canadian graduate and undergraduate students have gained hands-on hardware experience.

CADC: continues to receive support from CSA and to deliver quality product. Efforts to include data from more CSA-funded projects has had some success.

FUSE: there was a large conference at Victoria in August 2004 to discuss science achievements. The 2 Canadian operational scientists at Johns Hopkins are being transferred to JWST support, with only a fraction of their time remaining for FUSE (in line with NASA's support ramp-down). There is still an issue about low subscription rates for Canadian time.

Herschel/HIFI: launch is now scheduled for August 2007. The main Canadian contribution (the LSU) has increased in cost, although this is partly because of minor changes of scope requested from Europe. The LSU is entering the testing and delivery phase. There is some concern that a university-based hardware expert should be one the Canadian Science Team. There are on-going international discussions about Guaranteed Time, in which Canadians are playing an active part.

Herschel/SPIRE: the FTS test facility was delivered on time and on budget and progress is being made on the other main Canadian contribution, FTS data reduction software. There is a new proposal to develop this as part of a Data Processing Centre (DAPSAS) at Lethbridge. The 5 Canadian Associates on the project have been heavily involved in planning for Guaranteed Time.

JWST: Rene Doyon is now leading the tunable-filter part of the instrument and is assisting John Hutchings more broadly. This remains a major project, with the need for a large investment in time and effort by Canadians. There remains a concern that the team of dedicated individuals is small, and efforts should be made to encourage more people to become directly involved.

MOST: performing well with no signs of degradation, and generally considered to be a great success. Following requests, there has been a modest increase in CSA support in order to fund equipment needs and personnel to efficiently deal with the data.

Planck: CSA continues to support efforts on Quick Look software for both Planck instruments (HFI and LFI). This is a very modest contribution, for which Canadians can become fully engaged in Planck science exploitation. The new Planck science case (the "Blue Book") is now available.

UVIT: progress is being made on collaborating with India on this project. A Canadian web-site should be developed to provide more accessible information.

FUTURE PROJECTS

There are on-going discussions (and in some cases seed funding) for the following future missions: BRITE (a nanosat for monitoring bright stars); DUNE (or some other weak lensing mission); Lunar Telescope (a proposal to investigate the possibility of liquid mirrors on the moon); and NuSTAR (a NASA SMEX mission at x-ray wavelengths with a possible Canadian component).