Theory and Computation Committee - Report to the CASCA Board Nov. 2005

submitted by Rob Thacker, past chair

This is a report on a special open session sponsored by the committee, during the CASCA meeting in Montreal, May 2005.

The meeting ran parallel to a Gemini session, so attendance was moderate (about 25 people). I summarized the LRP as it relates to computing, and our thoughts on where things would go. I made a key point of highlighting the MTRC recommendation "..The strategy must ensure access which satisfies the demand of its theoretical astrophysics community".

Responses were similar to those at the LRP meeting in Victoria, most people widely agreed this was necessary infrastructure, but it was entirely unclear how it would be funded. A discussion on archiving was unsuccessful since despite the announcement email noting this would be a discussion point, key personnel were absent.

Robin Humble presented an update on goings-on at CITA and possible future proposals. This has obviously been crystallized in the SCINET proposal.

I also discussed the C3.ca LRP for HPC and how that would relate to our plans. Details of proposed budgets were given, as well as other recommendations, particularly relating to hiring of HQP and the establishment of single entity "IMPACT Canada" to oversee the overall HPC strategy.

Attendees were surveyed as to whether there were any specific computing needs that were not being met, but by and large the small cross-section attending were satisfied with their access, and CITA was acknowledged as doing a good job. Any issues with next-generation problems were under examination (e.g., CMB analysis requirements).

I then spoke at the HPCS2005 meeting in Guelph on the desire of astronomy to develop our own HPC strategy and possibly facility. This was met with skepticism, again primarily because of funding match issues, although a fair summary would be that a number of key C3 people were broadly supportive, provided that we did not encroach into the general HPC funding pool too heavily. It is safe to say that a number of people within C3 were unaware of some of the leading-edge computations being done in the astrophysical community and I think this meeting made a number of people take notice that there are individuals ready to use Tier 1 facilities right now.

The LRP for HPC has resulted in the establishment of the National Platforms fund by CFI.