MTR Townhalls

The following questions are being provided to the community ahead of the townhalls so that presenters and attendees are aware of some of the issues that the MTR Panel has been discussing. The list, which is not exhaustive in any sense, is being provided to solicit input and spur discussions, but we fully anticipate individuals may want to talk about other issues as well, and strongly encourage the submission of short talk requests to the local contacts. Those unable to attend are welcome to submit topic suggestions to the MTR Chair Rob Thacker (thacker@ap.smu.ca).

As with MTR-day and previous townhalls, the MTRP will give a short presentation which will be followed by requested talks. The discussion sessions will then be determined in an informal manner that reflects a balance between the concerns of the MTRP and the attendees at each locale.

Preparations are underway to provide a live stream via the MTRLRP youtube channel.

- 1) Are there new emerging or existing science areas that have grown significantly in importance since LRP 2010 that should be folded into our long-term plan?
 - between 2015-2020 there could be up to 20 new hires across the country
- 2) What are realistic aspirations for Canadian space astronomy?
 - Are there any reasons to change the recommendations in the LRP (other than obvious mission name changes)? Do you believe the LRP recommendations in space are still valid?
 - How much do we want urge CSA to focus on world leadership missions with broad science scope, versus developing the ability for Canada to lead smaller, more targeted, but nonetheless unique, missions.
- 3) The LRP made a number of recommendations for post-doc support via various channels that have not materialized.
 - Does the community feel that existing channels for prize postdoctoral fellowships (NSERC PDF, Banting, CITA, CITA National, etc.) are useful for the development of Canadian astronomy?
 - Would the community support a suggestion to channel existing funding into post-docs for short-term but specific high-importance projects, JWST being an obvious example?

- 4) What aspects of SKA science are most compelling to our community, especially following the re-baselining? How does the Canadian community anticipate organizing itself as SKA1 takes shape?
- 5) The timeline of redevelopment of CFHT is a difficult issue, with numerous excellent science cases colliding. Nonetheless, despite notable concerns about funding and organizational development, a strong recommendation has been made by the GAC & LRPIC committees that MSE take priority over planned surveys.
 - Is the community supportive of this plan and the shared risks to planned surveys it entails?
- 6) At present, Canada is not playing a significant role in any large astronomical surveys, ongoing or planned (e.g. LSST, DES, Euclid). Do you feel that national participation in survey science is essential to the health of our community in any way? If so, what type of participation would be best, both in terms of the greatest benefit to Canadian astronomy and the best match to our abilities (to build what is needed, handle the data analysis, carry the costs):
 - Joining an existing collaboration/survey like LSST or Euclid;
 - providing ancillary support data with which access to surveys might be negotiated (e.g. CFHT Megacam surveys, CASTOR); or
 - leading a major survey initiative of our own (e.g. MSE)?

What are the pros and cons of each approach?

- 7) The CDC white paper gives an excellent summary of many important issues for computing infrastructure (especially at the national access level). Are there any specific concerns or a danger of needed infrastructure falling through the cracks in the CC/CFI funding process?
 - availability of funds for developing software has always been an issue, but other examples include last mile networking or mid-range visualization. Are we missing other potential roadblocks?
- 8) LRP2010 presented rankings of the various facilities/projects sorted by cost (small/medium/large) and with some thought to relative schedules. Given that the schedules for some projects are now close to colliding, we may need to place relative

priorities on very different facilities and missions i.e. SKA vs MSE on the ground, ATHENA vs SPICA vs e.g WFIRST in space.

- What is your opinion on the merit of prioritizing very different facilities?
- If we were to prioritize, which facility on the ground and in space would be your personal highest priority?