Computation and Data Committee Report to the CASCA Board, Dec 2020

Current Committee Membership:

Catherine Lovekin (Mount Allison) (chair)

Pauline Barmby (Western)

J.J. Kavelaars (HIA/NRC/CADC)

Adrian Liu (McGill)

James Wadsley (McMaster)

Term ends: 30 June 2021

Term ends: 30 June 2022

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The current committee members, with the exception of Adrian Liu, are all scheduled to rotate off the committee next year. James Wadsley was originally scheduled to rotate off this past June but has agreed to serve one more year on the committee for continuity. Some thought should be given to potential new members, and work towards a more staggered rotation to smooth future transitions.

Compute Canada/NDRIO

The transition from Compute Canada to the New Digital Research Infrastructure Organization (NDRIO) is continuing. In August, nominations and applications for the inaugural Researcher Council were announced, and the Council was chosen before the Annual General Meeting in September. The 22 member council includes one astronomer, Dr. Erik Rosolowsky.

Over the coming year, NDRIO plans to build a strategic plan, which will be based in part on consultation with the research community. This will assess current services and identify priority-based needs for computing, data, and software. As part of this process, a needs assessment survey will be circulated soon, and all members of CASCA should be encouraged to complete it. NDRIO has also issued a call for white papers on the current and future state of DRI in Canada. The Computation and Data Committee is writing a paper for submission on behalf of CASCA. In addition, Dr. Kristine Spekkens is leading a white paper on SKA, and Dr. J.J. Kavelaars is leading a white paper for the CADC.

In addition, NDRIO has three working groups working on current state position papers, focused on the three pillars of DRI: Advanced Resources for Computing (ARC), Data Management (DM), and Research Software (RS). Again, astronomy is well represented on these committees: Dr. Catherine Lovekin is serving on both the ARC and RS working groups, and Dr. J.J. Kavelaars is serving on the DM working group.

For the immediate future, current allocation methods will remain unchanged until the spring of 2022. A new process for applications will be developed in the fall of 2021, and that process will replace the existing Compute Canada structure in 2022.

COVID-19

As with the rest of activities outside and inside astronomy the Computation and Data Committee has experienced a work slow-down due to COVID issues. In particular, and highly justifiably, the focus of Compute Canada compute centres and SSC support shifted rapidly to supporting the development of research programs for COVID. This pivot, coupled with social distancing and work-place isolation, has put a number of projects on hold or slowed them considerably. The immediate impact has been a slowing of development of new capabilities for CANFAR and significant slowdown in the development of new archive capacity within the CADC. The telescopes and projects that CANFAR/CADC serve have also seen a substantial drop in their data rates and extensions of project deadlines. As such, the delays which are being seen in deploying new computing and storage have largely been compensated for in delays seen at the data provider ends. The Computation and Data Committee expects that in the end normalcy will return and there will not be any long term negative impacts due to COVID shutdowns.