

High-Level Facility Summaries and Articles Promoting Accelerator Science

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Through this LOI, we would like to encourage the formulation of high-level facility summaries to serve as high profile citeable publications for the accelerator field. In addition, we would like to propose a more general community effort towards enhancing the popular and academic appearance of accelerator physics.

Following an initiative of the PRAB Editorial Board and with the strong support of the APS DPB, in 2019 Physical Review Accelerators and Beams announced a special collection of articles reviewing user-facility accelerators [1]. The then Chair of the DPB Publication Committee, Michael Blaskiewicz, agreed to act as the Special Editor of this collection. The announcement was distributed through various channels, including the mailing lists of the APS-DPB, the EPS-AG, and the EPS-HEPP Board.

The special collection of user-facility accelerators is meant to serve several important purposes, namely

- 1) to provide useful up-to-date references for the accelerator community and for the users alike,
- 2) to allow users an easy way to give appropriate credit to the accelerator team, which enabled the experiment to occur,
- 3) to increase the PRAB journal Impact Factor, and
- 4) to improve the Accelerator Science visibility in general.

Each user facility was and is encouraged to produce a document describing their machines and relevant systems. This will allow their users to give appropriate credit to the accelerator team, which enabled the experiment to occur. Regularly updated articles describing upgrades and operational improvements are encouraged so that fresh up-to-date references will always be available.

So far, a single facility review article has been published, on the UK CLARA facility [2]. Snowmass 2021 will provide an excellent forum to advertise this initiative, to alert users, and to convey our expectation and aspiration to the US facilities.

Another parallel effort for raising the visibility and academic standing of the community could aim at promoting accelerator-related articles in prestigious or widely-read journals like Physical Review Letters, Physical Review X, Nature, Scientific American and Physics Today.

References

1. <https://journals.aps.org/prab/speced/USER-ACCEL>

2. <https://journals.aps.org/prab/pdf/10.1103/PhysRevAccelBeams.23.044801>