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Recent diagnostic upgrades at the Solaris storage ring

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This work summarizes the most significant diagnostic upgrades that have been implemented, as well as those currently under development, at the Solaris synchrotron facility. These include the installation, startup, and initial testing of a Bunch-by-Bunch Feedback (BBF) system that is currently being implemented at the Solaris synchrotron. Once operational, the BBF system will provide real-time corrections on a per-bunch basis, significantly enhancing beam stability. Efforts are also underway to develop a system for measuring the vertical and horizontal tunes without disturbing the electron beam. Additionally, a beam loss monitoring system is being developed and installed. Complementing these activities, numerous diagnostic scripts have been created, including those that utilize fast acquisition and turn-by-turn data from beam position monitors.

Footnotes

Paper preparation format

LaTeX

Region represented

Europe

Funding Agency

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