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## Electron Beam Instrumentation for SwissFEL: Advancements and Future Directions

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SwissFEL has been in user operation since 2019. Central to its ongoing success and enhancement is the continuous development of the properties of the electron beam, which requires ever more accurate instrumentation. This poster provides a comprehensive overview of the latest advancements in electron beam instrumentation at SwissFEL. which are pivotal for improving the facility's operational reliability, enhancing the resolution of the instruments, and for enabling new lasing modes.

These enhancements not only contribute to the robustness and efficiency of SwissFEL but also pave the way for new avenues of scientific inquiry and experimentation. The poster will further discuss the implications of these improvements for future research and the potential they hold for the evolution of free electron laser facilities worldwide.

## **Footnotes**

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