

The Development of a Beam Loss Diagnostic System for the BEPCII Storage Ring

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Aiming at the beam loss problems when BEPCII operates on the high beam current with multi-bunch, we developed a beam loss diagnostic system based on bunch by bunch beam position measurement. By using this system and combining with the accelerator hardware conditions as well as the dedicated machine experiments, it's relatively clear for operator to understand some beam loss events, especially the beam loss caused by the RF cavity trip, tune drift and multiple bunch instability. These proved that the system is very useful for the operation of accelerator.

References

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