IPAC'25 - the 16th International Particle Accelerator Conference



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Six-dimensional phase space reconstruction with multimodal CNN

Sunday 1 June 2025 14:00 (2 hours)

The information on phase space in all six dimensions is required for various accelerator experiments. We developed an algorithm based on Convolutional Neural Network (CNN) that can be used instead of the traditional back projection techniques because it is less computationally intensive and has a simple architecture. Our method has shown consistency with the simulation, and we plan to validate it on data taken at the KEK– Superconducting Test Facility (STF).

Footnotes

Paper preparation format

Word

Region represented

Asia

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