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Cryogenic permanent magnet undulator using liquid nitrogen tank cooling

The CUT18 represents a significant advancement in undulator technology. It integrates a liquid nitrogen (LN_2) tank cooling system, utilizing the facility's existing LN_2 supply line to improve resource efficiency and reduce operational costs. The adoption of advanced NdFeB magnets, optimized with a 17-degree magnetization tilt, significantly enhances magnetic field performance and achieves a high deflection parameter (K > 2).

Footnotes

Paper preparation format

Word

Region represented

Asia

Funding Agency

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Session Classification: Closing Remark