

Extremely stable operation of self-seeding FEL at PAL

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The operation of hard X-ray FEL in a self-seeded mode requires much more precise control of electron phase space distribution compared to a SASE mode. In PAL-XFEL, we developed a unique RF feedback control based on high precision e-beam characterization (combined with ~ 1 fs RF timing distribution) to maintain the optimized self-seeded FEL without drift during the user run.

Footnotes

Funding Agency

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