International Workshop on Future Linear Colliders, LCWS2024



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Type: Oral presentation (in person)

The Compact Positron Source

Wednesday 10 July 2024 09:00 (20 minutes)

We present designs and plans for a university-scale positron source that can deliver low-emittance beams for experiments [1]. The source is based on a Penning-Malmberg trap. We discuss positron generation and extraction, with specific focus on bunch manipulation at the exit of the trap. We describe some applications of positron beams from the trap.

[1] Compact source of positron beams with small thermal emittance. R Hessami and S Gessner, Phys. Rev. Accel. Beams 26, 123402 (2023)

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Session Classification: Sources

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