

Particle Sources for Advanced Accelerators

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Experimental and theoretical development of particle injectors for the generation of high-brightness beams are important for future accelerators. Topics include novel methods to generate particle beams with increased efficiency, peak and average brightness, methods that will allow the manipulation of their 6D phase space distribution and novel diagnostics. This includes particle injectors that can generate beams with sufficient brightness for future particle colliders and for near term applications. Topics include spin-polarized sources (e.g. from polarized gases) and methods to rapidly capture and accelerate secondary particles, such as positrons and muons. High-fidelity phase-space manipulation methods including during injection, during acceleration and post initial acceleration, such as compact cooling in plasma undulators, etc and high resolution diagnostics are also of interest.

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Session Classification: Guns