

## **Operation of the High-Charge PHIN RF Photoinjector with Cs<sub>3</sub>Sb Cathodes**

The PHIN photoinjector at CERN is used to study the feasibility of an RF photoinjector for the drive beam of the Compact Linear Collider (CLIC) as an alternative to the baseline design, using a thermionic gun. The CLIC drive beam requires a high bunch charge of 8.4 nC and 0.14 ms long pulse trains, which is challenging with respect to the photocathode lifetime and the laser system. To relax the requirements on the laser system, studies of photocathodes sensitive to visible light are on-going. This talk will report on the first operation of the PHIN photoinjector with Cs<sub>3</sub>Sb cathodes and green laser light. Lifetime measurements will be presented.

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