



Contribution ID: 611 Contribution code: WEPC67

Type: **Poster Presentation**

Preliminary tests of NaKSb photocathodes in high gradient S-band photoinjector

Wednesday, 22 May 2024 16:00 (2 hours)

We report on initial characterization of NaKSb photocathodes in the Pegasus high gradient S-band RF photoinjector. These cathodes were grown at Cornell and transported by air to UCLA. Preliminary characterization was done in the UV and yielded a quantum efficiency of 1.5% and a mean transverse energy of 0.7 ± 0.2 eV measured by solenoid scan. Photocathode response at different wavelengths as well as measurements of other important parameters such as cathode life-time, dark current levels and the time response are being planned.

Footnotes

Funding Agency

Center for Bright Beams

Paper preparation format

LaTeX

Region represented

North America

Primary author: GARCIA, David (Particle Beam Physics Lab (PBPL))

Co-authors: ODY, Alexander (Argonne National Laboratory); SCHAAP, Brian (University of California, Los Angeles); PENNINGTON, Chad (Cornell University (CLASSE)); MAXSON, Jared (Cornell University); MUSUMECI, Pietro (University of California, Los Angeles)

Presenter: GARCIA, David (Particle Beam Physics Lab (PBPL))

Session Classification: Wednesday Poster Session

Track Classification: MC2: Photon Sources and Electron Accelerators: MC2.T02 Electron Sources