

Contribution ID: 911 Contribution code: MOPL099 Type: Poster Presentation

## GaAs cathode activation with Cs-K-Sb thin film

Monday, 8 May 2023 16:30 (2 hours)

GaAs cathode is a unique device generating a spin-polarized electron beam by photo-electron effect with a circularly polarized laser illumination. Negative Electron Affinity (NEA) surface which is artificially made has an essential role in spin polarization, but the NEA surface has limited vitality. In this study, we activated GaAs as NEA cathode by evaporating Cs, K, and Sb metal on its cleaned surface. The experimental results including the quantum efficiency spectrum and the lifetime will be presented.

## **Funding Agency**

This work is partly supported by U.S.-Japan Science and Technology Cooperation Program in High Energy Physics.

## **Footnotes**

## I have read and accept the Privacy Policy Statement

Yes

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Session Classification: Monday Poster Session

Track Classification: MC1: Colliders and other Particle Physics Accelerators: MC1.A08: Linear

Accelerators