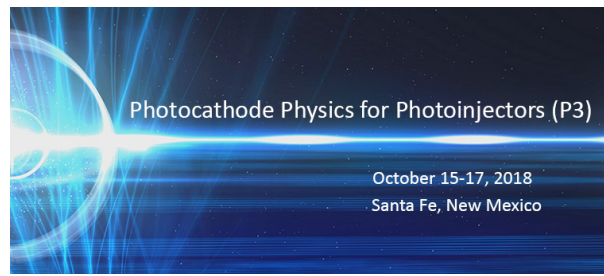


## Photocathode Physics for Photoinjectors 2018



Contribution ID: 20

Type: **not specified**

### Operation of Jefferson Lab Polarized Electron Sources

*Monday 15 October 2018 16:25 (20 minutes)*

This contribution describes Jefferson Lab polarized electron sources where the world record of high current polarized electron beam was delivered. Polarized GaAs Superlattice photoguns with long lifetime represents a significant challenge for proposed facilities that must operate in excess of tens of mA of polarized average current. Damage due to ion bombardment is the dominant mechanism that reduces photocathode yield. Highlights of R&D to improve the performance of polarized electron sources and prolong the lifetime of strained-superlattice GaAs are presented.

**Presenter:** Dr SULEIMAN, Riad (Jefferson Laboratory)

**Session Classification:** Session 4

**Track Classification:** Session 4: Application Oriented Research: Spin Polarized Sources