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Monitoring GaAs photocathode heat cleaning temperature<sup>1</sup> NATHAN CLAYBURN, University of Nebraska- Lincoln, KENNETH TRAN-THAM, University of Nebraska- Kearney, MATTHEW DUNN, TIMOTHY GAY, University of Nebraska- Lincoln — Before a GaAs photocathode can be "activated" to achieve a negative electron affinity condition, the GaAs crystal must be cleaned. This is most commonly done by ohmic, radiative, or electron bombardment heating. We report a new technique to monitor the temperature of heated GaAs photocathodes by observation with a camera. The method is robust and yields the same temperatures for different GaAs samples heated using different methods in different mounting configurations.

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