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## An overview of spin-polarized photocathode research at cornell university

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The development of a robust spin-polarized electron source capable of sustaining mA scale average beam currents in a photoinjector is critical for many future accelerator facilities such as the International Linear Collider (ILC). In this proceeding we overview the several efforts being carried out at Cornell towards this end, including: high current (>1 mA) gun tests of robust activation recipes of GaAs at the HERACLES beamline, the development and demonstration of GaN as a robust spin polarized source and Density Functional Theory (DFT) ab initio studies of alkali-antimonide photocathodes as potential spin polarized electron sources.

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