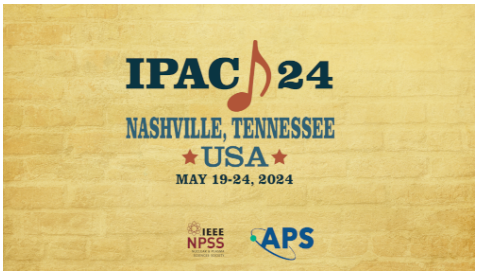

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High gradient RF photoinjector at LANL

Thursday, 23 May 2024 09:00 (30 minutes)

High frequency RF guns cryogenically cooled to liquid nitrogen temperatures or lower offer potential for extreme accelerating electric fields exceeding 250 MV/m at the cathode. This can result in enormous increase in the brightness of electron beams obtained from RF guns but can be challenging to integrate high QE photocathodes. This talk will detail the efforts at LANL towards the realization of such a gun and possibly the first field and beam results from a C band room temperature gun.

Footnotes

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