

Abstract Submitted
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New Gas Electron Multipliers at MIT: Fabrication, Processing, and Testing SCOTT HERTEL, Laboratory for Nuclear Science, Massachusetts Institute of Technology — Gas Electron Multipliers (GEMs) concentrate powerful electric fields through holes in metal foils to turn single drifting electrons into cascades large enough to be easily detected. Gains of $10 - 10^3$ are achieved. Until recently fabricated solely at CERN, new GEMs have been developed by Tech-Etch, a private company located in Plymouth, Massachusetts. We describe the testing of these GEMs for detector use. We also investigate coarser-grained GEMs, which have robustness advantages including ease of manufacture. First results will be given.

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