

FiberGLAST: Test Results of the Fiber Tracker System

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The FiberGLAST telescope is a large-area instrument concept for NASA's Gamma Ray Large Area Space Telescope (GLAST) program. The detector uses scintillating fiber arrays read out with multi-anode photomultiplier tubes for both particle tracking and calorimetry. We have tested a prototype instrument during a beam test at Louisiana State University. We present the prototype instrument characteristics and detector performance, and discuss laboratory tests of fiber light output, detection efficiency, occupancy, cross-talk, and fiber radiation damage.