

Abstract Submitted
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Fiber Optics at the JLab CLAS12 Detector¹ JOHN KROON,
KEVIN GIOVANETTI², James Madison University — The performance of wave-
length shifting fibers, WLS, and method of coupling these fibers to extruded
polystyrene scintillators are currently under study at James Madison University.
These components are two of the main elements for the PCAL, preshower calorime-
ter, proposed as part of the 12 GeV upgrade for the CLAS detector at Jefferson
Laboratory. The WLS fibers have been prepared, optically coupled to scintillator,
and tested in order to determine their overall performance as a method of readout.
Methods of coupling fiber to scintillator, a description of the test setup, test methods,
PCAL readout performance, and fabrication recommendations will be presented.

¹National Science Foundation, Dr. Kevin Giovanetti

²Advisor

John Kroon
James Madison University

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