

Abstract Submitted
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Quality control of sPHENIX EMCal blocks¹ MASON HOUSE-NGA, University of Illinois at Urbana-Champaign, UIUC NPL TEAM, SPHENIX COLLABORATION — The sPHENIX experiment at Brookhaven National Lab's (BNL's) Relativistic Heavy Ion Collider will study collisions of protons and nuclei. sPHENIX was designed to accurately explore properties of the Quark Gluon Plasma and to investigate effects in "cold" Quantum Chromo Dynamics with the first physics beams scheduled for 2023. Being the primary detector to identify and measure the energies of electrons and photons, the sPHENIX Electromagnetic Calorimeter (EMCal) is one of the key ingredients to enable this broad set of measurements. The EMCal consists of tungsten absorber blocks with embedded scintillating fibers. The Nuclear Physics Group of the University of Illinois at Urbana-Champaign is currently in the process of producing almost 4000 of these absorber blocks. Before a block is shipped to BNL, its quality with respect to dimensional accuracy, density, light transmission and scintillation properties is evaluated at UIUC. This poster will discuss these testing processes and the monitoring tools available to quickly access and evaluate each block's overall quality.

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