

Abstract Submitted  
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**Tungsten and Scintillating Fiber Electromagnetic Calorimeter for sPHENIX** MICHAEL HIGDON, University of Illinois at Urbana-Champaign — Utilizing the products of relativistic heavy ion collisions, one can shed light on the physics behind the earliest stages of the universe. Consisted of unbounded quarks and gluons, the Quark Gluon Plasma (QGP) results from the collisions of heavy ions. The use of electromagnetic and hadronic calorimetry is an option for studying the strong interactions which govern the QGP. The sPHENIX detector is planned for use at the Relativistic Heavy Ion Collider (RHIC) which detects jets from the collisions of large nuclei. The sPHENIX EMCAL will consist of a tungsten absorber and scintillating fibers and will be read out with silicon photomultipliers. Made up of many individual towers, the EMCAL covers full  $\phi$  and large  $\eta$ . We will discuss the production process of these towers as well as the projectivity of the towers. Towers projective in one dimension ( $\phi$ ) have been produced and tested in beam at Fermilab. We will present recent developments in the first two dimensionally projective towers and future plans.

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