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Search for Friendly Mini Black Holes in the Laboratory[1] ROMULUS GODANG, C.M. JENKINS, University of South Alabama, MARCO CAVAGLIA, LUCIEN CREMALDI, ROY ARUNAVA, DON SUMMERS, University of Mississippi — Black holes are among the most intriguing objects in the universe. Massive astronomical black holes are now believed to exist with masses as large as a billion times the mass of Sun. In this paper we discuss the possibility of how to find observational evidence for friendly mini-black holes in the laboratory if they exist in nature. We study the mini-black holes using our Monte Carlo generator called "CATFISH" (Collider grAviTational FIeld Simulator for black Holes). We are investigating the signatures of mini black hole production in the proton-proton collisions at the CMS experiment (Compact Muon Solenoid) at CERN (European Organization for Nuclear Research) near Geneva, Switzerland.

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