

Abstract Submitted
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Development Of Gas-Electron Multiplier Based Time Projection Chamber in MAMI Crystal Ball MATHEW MEHRAN¹, The George Washington University Nuclear Physics Research Group, OLIVER STEFFEN, MARTIN WOLFES, WOLFGANG GRADL, Institute for Nuclear Physics at the Johannes Gutenberg University of Mainz, WILLIAM BRISCOE, The George Washington University Nuclear Physics Research Group, THE GEORGE WASHINGTON UNIVERSITY NUCLEAR PHYSICS RESEARCH GROUP TEAM², MAMI TEAM³ — Equipment development project looking for a faster and more reliable replacement for the multiwire proportional chamber (MWPC) charged particles tracking system in the MAMI Crystal Ball in Mainz, Germany. With the gas electron multiplier (GEM) based time projection chamber (TPC) you will be able to perform a whole series of experiments that require higher beam rates and better resolution. One such experiment is the search for the f_0 and a_0 mesons.

¹I currently attend CSU on a masters/Ph.D. however the research I will be presenting was done as a student at the George Washington University as part of their nuclear physics research group.

²As part of the MAMI A2 collaboration

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