

Abstract Submitted  
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**Progress on  $H_\alpha$  at MCX** R. CLARY, S.H. CHOI, R. ELLIS, A. HAS-SAM, C. TEODORESCU, I. UZUN-KAYMAK, University of Maryland, MCX TEAM — The Maryland Centrifugal eXperiment uses a seven-chord  $H_\alpha$  measurement system to measure absolute intensity levels of the Hydrogen Balmer-alpha line in a rotating plasma with mirror magnetic geometry. Recently, new mirror insulators were designed and implemented, resulting in suppressed O-mode operation. We present comparisons between  $H_\alpha$  signals before and after the implementation of the new insulator. We also present progress in modeling neutral density for a rotating mirror geometry as well as relevant comparisons to experimental measurements on MCX. Lastly, we discuss upgrading the  $H_\alpha$  measurement system to include a 16-chord mid-plane array.

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