

THE MYSTERY OF X-RAY EMISSION IN LATE B, EARLY A TYPE STARS: A SURVEY. *L. Crigger, J. Kastner**, Department of Physics, lhc3786@rit.edu, jhkpci@cis.rit.edu

Theory suggests that late B-type and early A-type stars should not exhibit x-ray emission, because they have neither the high winds of hotter stars, nor the fully convective atmospheres of cooler stars. Yet, puzzling cases exist of A and B stars showing significant X-ray output, without clear cause. This presentation will submit the results of a survey of approximately 200 such objects - arguably the most complete catalogue of these stars yet compiled - and examine the underlying similarities, differences, and trends of this group. To explain this odd behavior, possible theories such as weak wind models and unseen young companions will be critically analyzed. Plans for future research will also be highlighted.