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**The Dark Energy Survey: Redshifts, X-ray Temperatures and Luminosities for Galaxy CLusters within Science Verification Data**  
CHRISTOPHER MILLER, Univ of Michigan - Ann Arbor, PHILIP ROONEY, KATHY ROMER, University of Sussex, JEESEON SONG, Korean Astronomy and Space Science Institute, YUANYUAN ZHANG, Univ of Michigan - Ann Arbor, DARK ENERGY SURVEY COLLABORATION, XMM CLUSTER SURVEY COLLABORATION — We present a joint analysis of the Dark Energy Survey (DES) Science Verification data and the *XMM* Cluster Survey (XCS). We identify  $\sim 200$  galaxy clusters covering a wide range of redshifts ( $0.03 \leq z \leq 1.25$ ) and temperatures ( $1 \leq T_X \leq 11$  keV). The median redshift of the sample is  $z \sim 0.4$  and the median temperature is  $T_X \sim 3$  keV. A majority are newly discovered clusters. We use a combination of archival and new spectroscopy to calibrate photometric redshifts to 1% precision and sub-percent accuracy. We examine a number of possible systematic effects which could bias the photometric redshift determinations including deblending in cluster cores, magnitude definitions, and photometric accuracy. We highlight the quality of the Dark Energy Survey data and the promise of large-area joint optical/X-ray galaxy cluster samples.

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