

Abstract Submitted  
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**Probing the debris disks of nearby stars with Fermi-LAT<sup>1</sup>**  
ALEXANDER RILEY, LOUIS STRIGARI, Texas AM University, TROY  
PORTER, ROGER BLANDFORD, Stanford University — Many nearby stars are  
known to host circumstellar debris disks, similar to our Sun’s asteroid and Kuiper  
belts, that are believed to be the birthplace of extrasolar planets. The bodies in  
these objects passively emit gamma radiation resulting from interactions with cos-  
mic rays, as previously observed from measurements of the gamma ray albedo of the  
Moon. We apply a point source analysis to four nearby debris disks using the past  
nine years of data taken by Fermi-LAT, and report on the prospects for detecting  
gamma-ray emission from these sources.

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Alexander Riley  
Texas A  
M University

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