TRANSITING PLANETARY DEBRIS IN THE ERA OF LARGE TIME-DOMAIN SURVEYS

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White dwarfs are likely hosts to remnant planetary systems which have survived post-main sequence evolution, as evidenced by atmospheric metal pollution, infrared excess from circumstellar debris, and metallic emission lines from a hot gaseous component of the debris disk. In rare cases, planetary debris can also be seen as it transits the white dwarf. Just two objects are currently known to exhibit recurring transit events with orbital periods ranging from hours to more than 100 days, while five strong candidates for transiting planetary debris were recently identified in a search for variable white dwarfs using Gaia and ZTF photometry, along with follow-up spectroscopy and high speed photometry. The sky coverage and depth of these and other surveys vastly increase the discovery potential for this class of objects, whose observational properties are still poorly constrained but offer insight into the mechanisms governing debris generation and evolution. In this talk we present an update to our method for identifying transiting debris candidates using a set of simple variability metrics applied to Gaia and ZTF photometry, and discuss new characterization efforts for some known and candidate systems.