

KINEMATICS OF MASSIVE WHITE DWARFS WITH(OUT) METAL POLLUTION TO CONSTRAIN
PLANETARY OCCURRENCE RATES IN INTERMEDIATE-MASS STARS

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Massive white dwarfs ($0.8-1.3 M_{\odot}$) may provide the best way to constrain planetary occurrence around intermediate mass main sequence stars ($4-7 M_{\odot}$). We want to assess whether these occurrence rates represent single star evolution alone or if there is stellar merger contamination. We use objects with UV spectra from the HST Snapshot program that is sensitive to white dwarf metal pollution to quantify merger contamination. High precision astrometric surveys have allowed us to get the velocity distributions of hundreds of thousands of white dwarfs in our galaxy. We use these distributions to compare observed kinematics with those derived from total ages. Since massive white dwarfs are expected to be slow, we can attempt to quantify merger byproducts by identifying the portion of high velocity massive white dwarfs.