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LISA Galactic Binaries in the WFIRST Microlensing Survey
MATTHEW DIGMAN, CHRIS HIRATA, Ohio State Univ - Columbus — Short-period galactic white dwarf binaries detectable by LISA are the only guaranteed persistent sources for multi-messenger gravitational-wave astronomy. Large-scale surveys in the 2020s present an opportunity to conduct preparatory science campaigns to maximize the science yield from future multi-messenger targets. The WFIRST microlensing survey will image seven fields in the galactic bulge approximately 40000 times each. Although the cadence is optimized for detecting exoplanets via microlensing, it is also capable of detecting eclipsing white dwarf binaries. I will present forecasts for the number of short-period binaries the WFIRST microlensing survey will discover and the implications for the design of electromagnetic surveys.

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