

# TOWARDS A VOLUME-LIMITED ALL-SKY SAMPLE OF EXTREMELY LOW-MASS WHITE DWARFS

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Single stellar evolution cannot explain all observed stellar populations. That is not surprising: most stars with one solar mass or above are part of a binary system, and around a quarter of those will interact during their lifetime, giving rise to astrophysical phenomena not witnessed by single stars. One particularly interesting scenario occurs when interaction happens as a star is leaving the main sequence before the onset of core helium burning. This can lead to enhanced mass-loss that allows the formation of so-called extremely low-mass white dwarf stars (ELMs). As remnants of binary evolution, ELMs can shed light onto the poorly understood yet crucial phase of common-envelope evolution and provide constraints to the physics of mass accretion. Most known ELMs were discovered in a magnitude-limited survey of the northern hemisphere using a colour selection, which excluded the cooler end of the population. In order to fully test theoretical models and their predictions, a sample covering all predicted ELM properties is required. This poster presents efforts towards obtaining a volume-limited sample all-sky sample of ELMs to serve as a benchmark for theoretical models.