

Double White Dwarf Binaries inside Globular Clusters

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Who am I?

Introduction

Methods

Results

Future plans

- PhD student in the MOCCA group
 - **MO**n**te** **C**arlo **C**l**u**ster sim**u**l**A**tor



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- Projects focused on double WDs binaries as multi-messenger sources



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 - **MO**n**te Carlo Cl**uster simul**A**tor
- Projects focused on double WDs binaries as multi-messenger sources
- Current project: comparisons between DWD population in MOCCA and observations



Our datasets

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- Large number of DWDs extracted from many different simulations of clusters



Our datasets

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- Large number of DWDs extracted from many different simulations of clusters
- 3 datasets



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- Large number of DWDs extracted from many different simulations of clusters
- 3 datasets
 - In-cluster



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- Large number of DWDs extracted from many different simulations of clusters
- 3 datasets
 - In-cluster
 - Escapers



Our datasets

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- Large number of DWDs extracted from many different simulations of clusters
- 3 datasets
 - In-cluster
 - Escapers
 - Standalone evolution



Observational datasets

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- Close binaries
 - Brown et al. (2020)
 - Schreiber et al. (2022)
 - Kosakowski et al. (2023)



Observational datasets

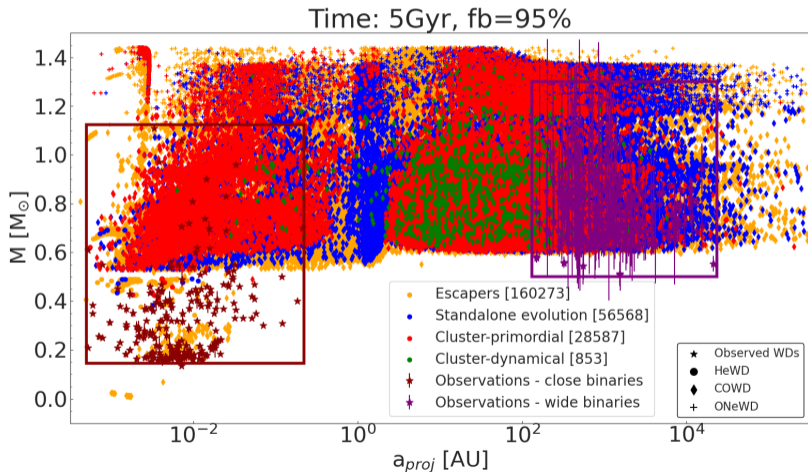
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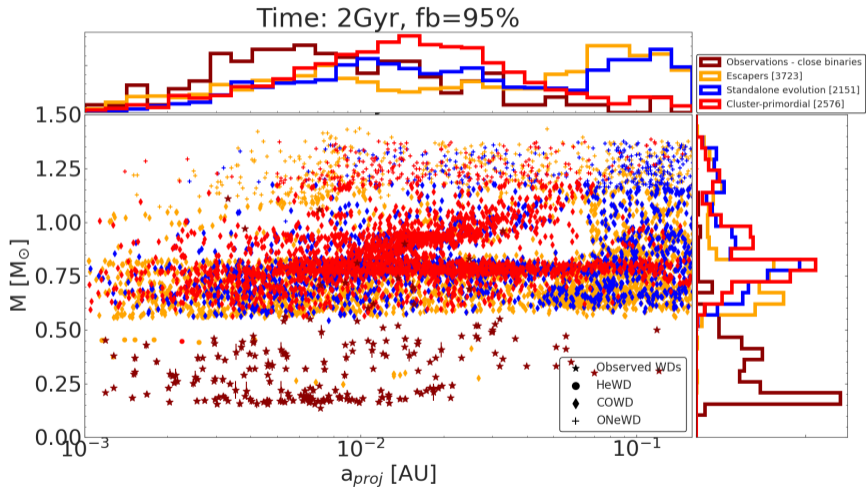
Results

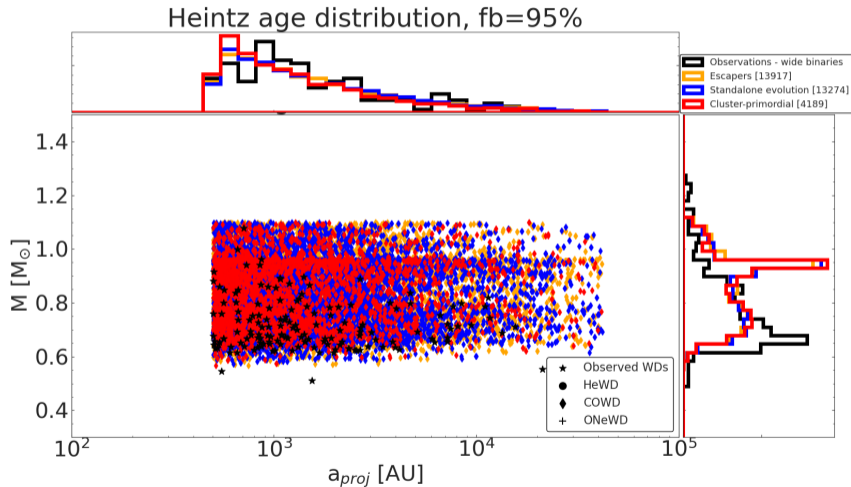
Future plans

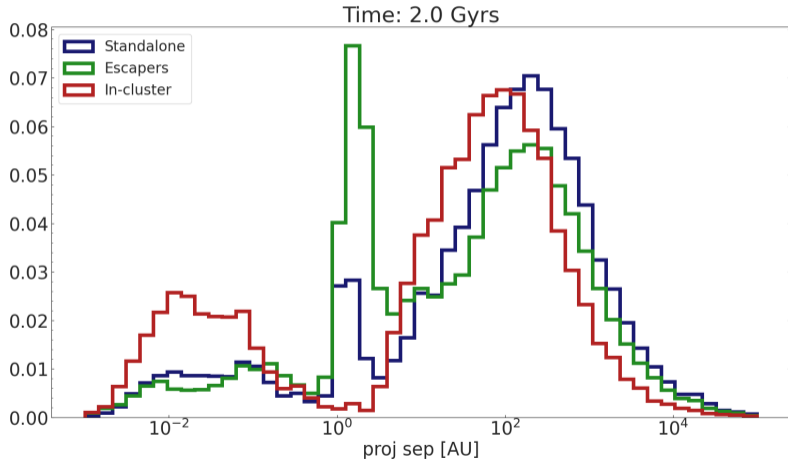
- Close binaries
 - Brown et al. (2020)
 - Schreiber et al. (2022)
 - Kosakowski et al. (2023)
- Wide binaries
 - El-badry et al. (2021)
 - Heintz et al. (2022)



Results - close binaries









Future plans

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- Paper almost ready for submission
- Work started on GW signals from large number of WD binaries