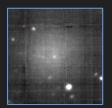


## Dwarf Properties and Satellite Planes Beyond the Local Volume



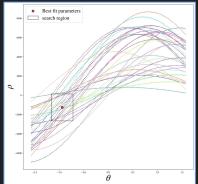
Planes of satellites: statistical outlier or common phenomenon?

Habas et al. 2020

## MATLAS survey:

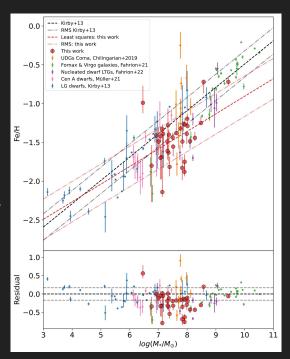
- 2210 dwarf galaxies identified in the MATLAS fields
- 2D analysis → initially no distance estimate for most dwarfs (~85%)
- PoS candidates in 26% of the fields
- Majority with dimensions between LG and the Cen A planes





## VLT/MUSE follow-up:

- 56 MATLAS dwarfs observed with MUSE
  - Gain line-of-sight velocity information
  - Confirm dwarf & satellite nature
- 75% are satellites of massive ATLAS<sup>3D</sup> galaxies
- Not enough dwarfs with spectroscopic data per system → no information about PoS
- Stellar populations: systematic deviation from the universal stellar mass-metallicity relation (Kirby+2013)



Paper: Heesters et al. 2023, in prep.

Paper: Heesters et al. 2021, A&A, 654, A161