

How do galaxies distribute in DM halos?

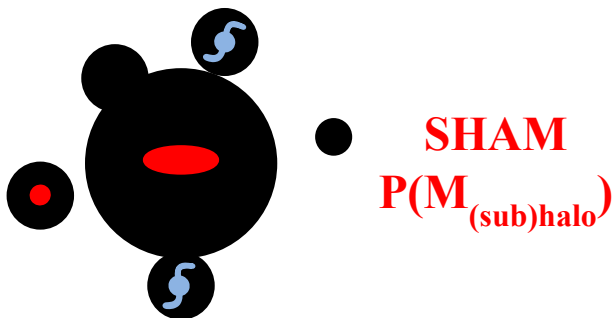


Fig 1. The principle of the Subhalo Abundance Matching

- ❑ Machine Learning & Parallel Programming & French
- ❑ single-tracer SHAM on  $r > 5 \text{ Mpc/h}$ 
  - ❑ multipoles: degeneracy still exists (index cut, void 2pcf, bispectrum tried)
  - ❑ projected 2pcf:
  - ❑ in different zbins
- ❑ SHAM matches CP-weighted 2pcf on  $r < 5 \text{ Mpc/h}$  instead of PIP-weighted 2pcf
- ❑ HOD for DESI 1% survey
- ❑ Another project that relates to the dissertation