

HALO/VOID ABUNDANCES IN MODIFIED GRAVITY MODEL

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- ◎ Chameleon/ $f(R)$ models: scalar field coupled with dark matter
 - ▣ Mimic expansion history of Λ CDM
 - ▣ Screening mechanism evades local gravity tests
- ◎ Extend excursion set formalism to compute signatures in rare object abundances
- ◎ Screening mechanisms induces environmental dependent formation criteria
 - ▣ Eulerian vs Lagrangian environments
 - ▣ Void: 1-Barrier vs 2-Barrier vs Eulerian approach
 - ▣ Additional correlations between environment and halos/voids