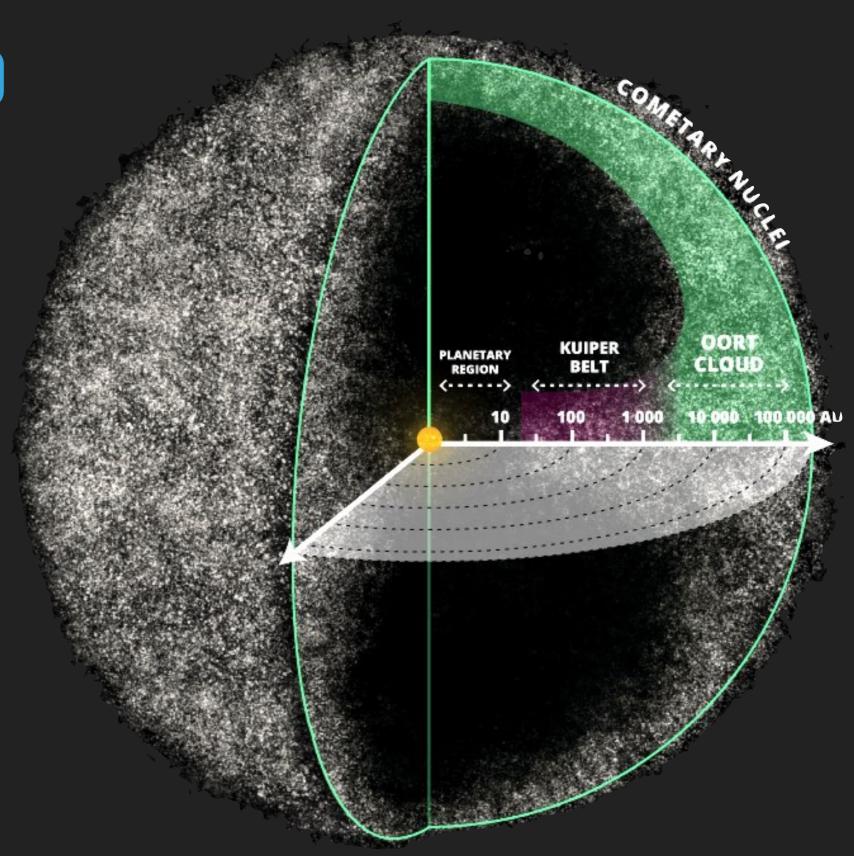
POPULATION OF THE OORT CLOUD

KATHERINE SHEPARD
ADVISOR: DR. NATHAN KAIB
ASTROPHYSICS

OORT CLOUD

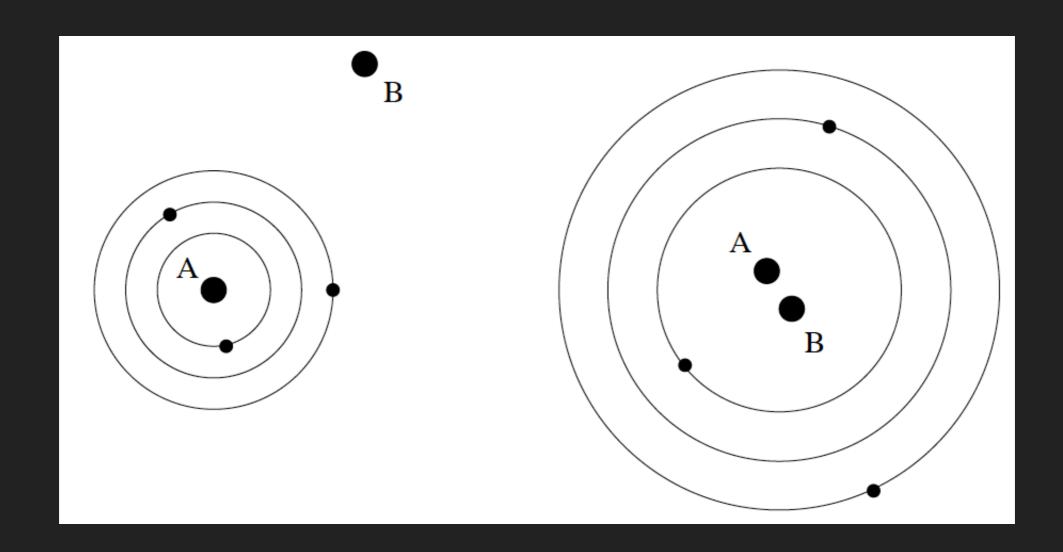


DISCREPANCY BETWEEN SIMULATED & OBSERVED POPULATION

- ▶ General consensus 10¹¹-10¹²
- Discrepancy
 - Oort Cloud: 10¹¹ 10¹²
- Proposed solution

WHAT IF THE SUN HAD A BINARY PARTNER?

Ultra-wide binary stars



WHY IS THIS IMPORTANT?

- Evolution of giant planets
- Birth environment of Sun
- Dynamical history of Sun
- Oort Cloud constrains history of Solar System