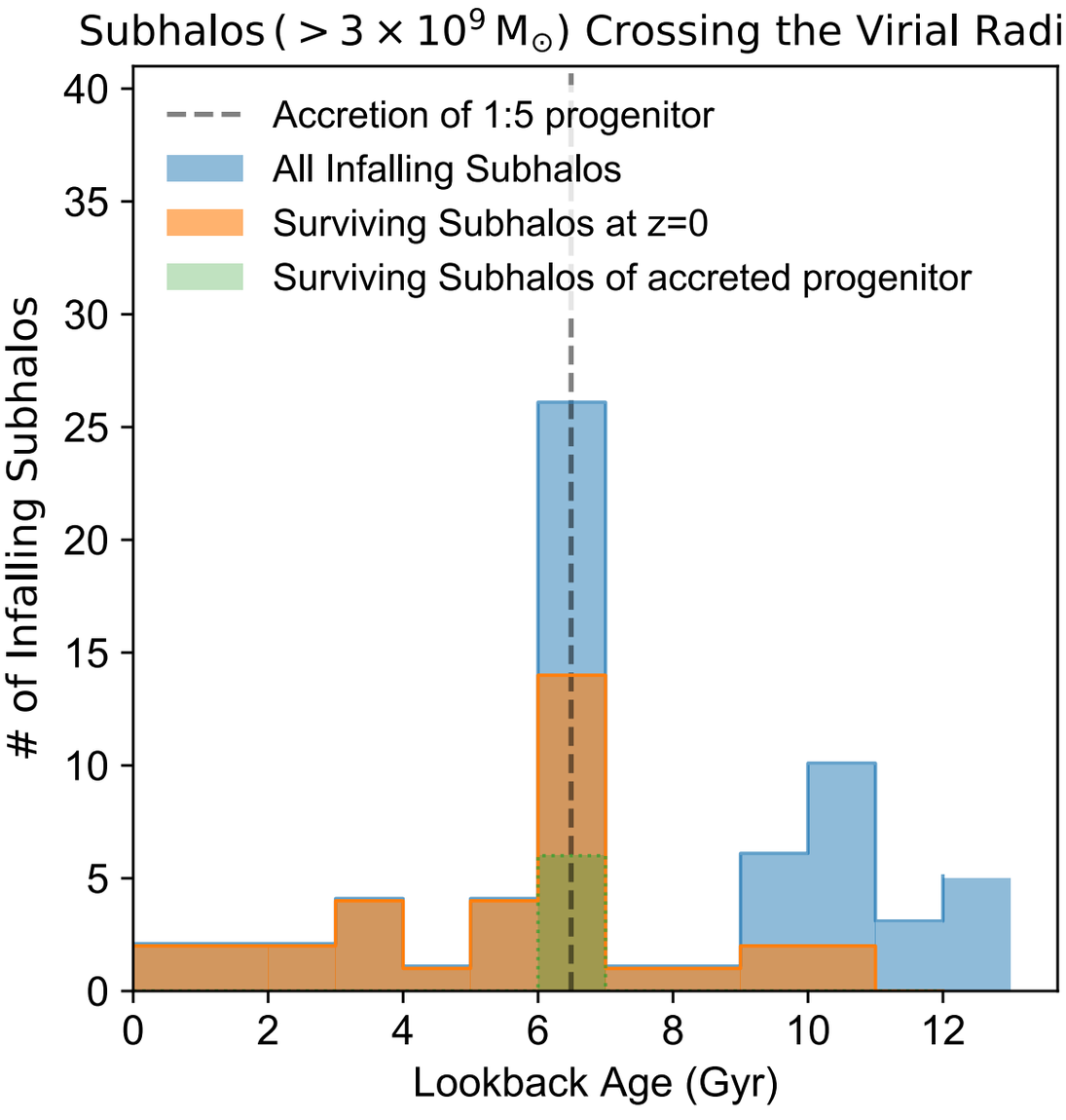
Do the satellites of M31 suggest an accretion of a large progenitor?

Richard D'Souza & Eric Bell

Context: *Studies of the halo and the disk of the M31 independently suggest a merger with a large progenitor (half the size of the MW) about 2 Gyrs ago (**D'Souza & Bell 2018, Hammer et al. 2018**).*



Main Results

- Accretion of large progenitor (>1:5) in a MW-mass halo.
- Simultaneous accretion of large number of subhalos hosting classical dwarfs.
- # much larger than the expected number of subhalos of the large accreted progenitor.

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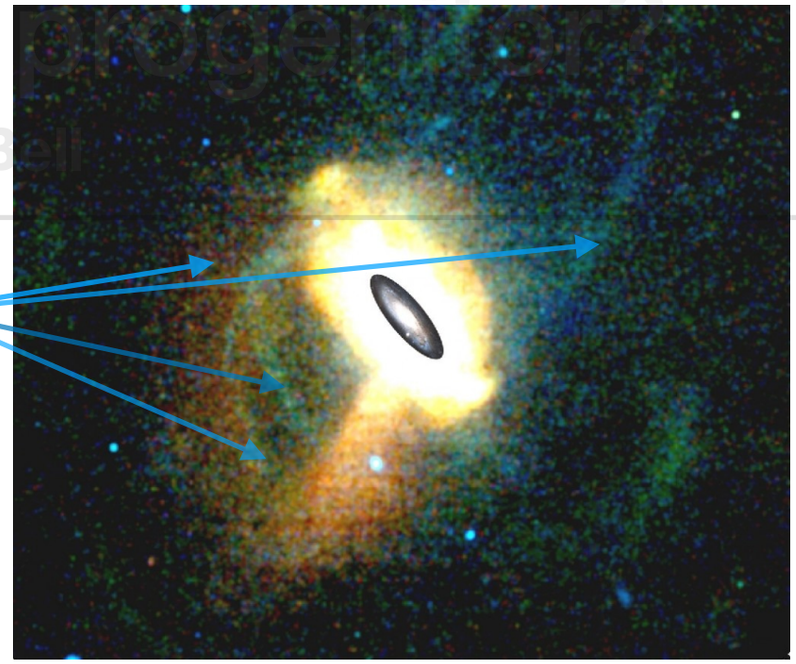
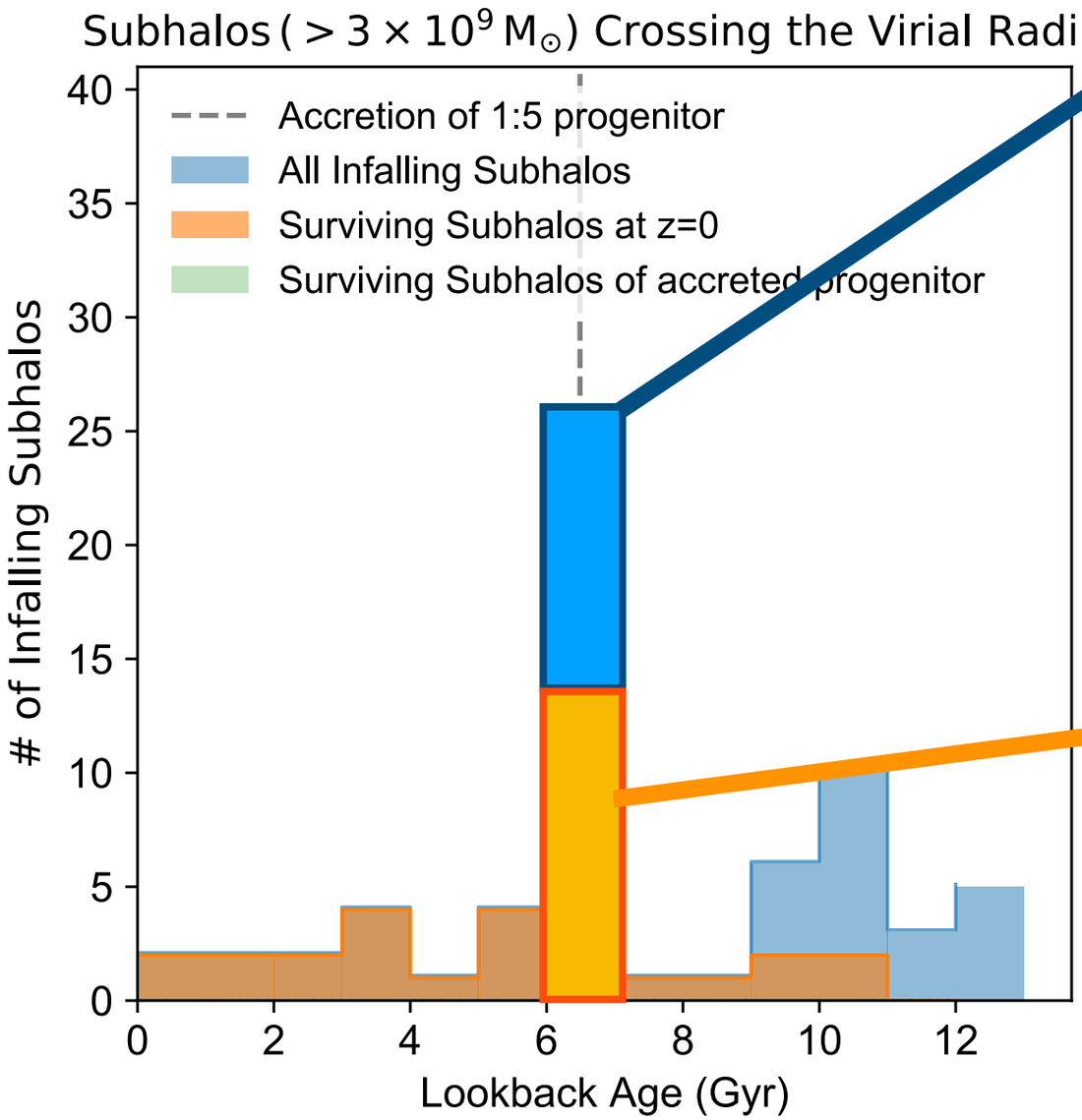
I 2-4 Sagittarius-like streams



Martin et al. 2014. McConnachie et al. 2018



II Simultaneous shutdown of star formation in large number of satellites