

An online seminar series organized jointly by SFU, UBC and UVic.



Princeton University

Because they are dark-matter dominated, dwarf galaxies provide some of the most stringent tests of our cold dark matter model. Specifically, Lambda CDM makes predictions about the number, shape, and spatial distributions of the faint friends of massive galaxies. I will present results from the Exploration of Local Volume Satellites (ELVES) survey, that constructs the largest sample of satellites around Milky Way-like hosts. Our ability to utilize dwarfs as tests of CDM is limited by our understanding of baryonic process; I will also discuss our efforts to use the Hyper Suprime Camera Survey to understand the role of feedback and merging in dwarf evolution. If time permits, I discuss what we know about black holes in dwarf galaxies, and how their demographics sheds light on the formation of the seeds of supermassive black holes.

<https://www.sfu.ca/~jwa304/seminars.shtml>