

Literature Reading

We will review 3 different topics:

1. Thick disk formation
2. Is the Milky Way typical?
3. The dark matter content of dwarf spheroidals

For the discussion you will have to read two different papers (on two different topics), and give presentations about these. There will be a long paper on one topic and a shorter paper on a second topic.

Long papers:

1. Schoenrich & Binney, 2009, "Origin and structure of the Galactic disc(s)", MNRAS, 399, 1145
2. Hammer et al., 2007, "THE MILKY WAY, AN EXCEPTIONALLY QUIET GALAXY: IMPLICATIONS FOR THE FORMATION OF SPIRAL GALAXIES", ApJ, 662, 322
3. Busha et al., 2010, "Statistics of Satellite Galaxies Around Milky Way-Like Hosts", <http://adsabs.harvard.edu/abs/2010arXiv1011.6373B>
4. Wolf et al., 2010, "Accurate masses for dispersion-supported galaxies", MNRAS, 406, 1220
5. Breddels et al., 2011, "Orbit based dynamical models of the Sculptor dSph galaxy" (ask me for a copy)

Short papers:

1. Sales et al., 2009, "Orbital eccentricity as a probe of thick disc formation scenarios", MNRAS, 400, L61
2. Wilson et al., 2011, "Testing formation mechanisms of the Milky Way's thick disc with RAVE", MNRAS, 413, 2235
3. Di Matteo et al., 2011, "The formation of a thick disk through the heating of a thin disk: Agreement with orbital eccentricities of stars in the solar neighborhood", A&A, 525, L3
4. Battaglia et al., 2008, "The Kinematic Status and Mass Content of the Sculptor Dwarf Spheroidal Galaxy", ApJ, 681, L13
5. Strigari et al., 2008, "A common mass scale for satellite galaxies of the Milky Way", Nature, 454, 1096

The schedule will be the following:

28/11: Thick disk formation: S1, S2, S3

5/12: Thick disk formation: L1

12/12: Is the Milky Way typical? L2, L3

19/12: Introduction to the dynamical modeling of dwarf galaxies

9/1: Dark matter in dwarf spheroidals: S4, S5

16/1: Dark matter in dwarf spheroidals: L4, L5

Since we are already starting next week, I have made the following assignments:

28/11: Sander Bus: S1

28/11: Robin Kooistra: S2

28/11: Omar Choudhury: S3

5/12: Matthijs Dries: L1

The Schedule for the rest of the course will be:

12/12: Sander Bus (L2) and Pawel Biernacki (L3)

19/12: Introduction to dynamical models (AH)

9/1: Mathijs Dries (S4) and Pawel Biernacki (S5)

16/1: Robin Kooistra (L4) and Omar Choudhury (L5)