

Workshop Schedule (Draft, 6/12)

Exploring the Dark Universe
Wright Education Building, Room 3015
June 28-29, 2007

Thursday, June 28

Getting Started

8:30 – 9:00 Registration and Cosmology Diagnostic Test
9:00 – 9:15 Welcome, logistics, overview, introductions
9:15 – 9:45 Getting Acquainted with the Universe
9:45 – 10:00 An Astro Toolkit
10:00 – 10:30 The Distance to M100 using Cepheid Variables

10:30 – 10:45 Break

All about Cosmology

10:45 – 11:15 After the Big Bang I
11:15 – 11:30 Modeling the Expansion of the Universe
11:30 – 12:00 Determining the Hubble Constant

12:00 – 1:00 Lunch

1:00 – 1:30 After the Big Bang II

Evidence for Dark Matter

1:30 – 1:35 Curious Box
1:35 – 2:15 Measuring the Mass of the Galaxy NGC 2742
2:15 – 3:00 Velocity Dispersions in Clusters of Galaxies
3:00 – 3:15 Break
3:15 – 3:45 Einstein's Universe
3:45 – 4:15 Lenses of Dark Matter
4:15 – 4:30 Summarizing Evidence for Dark Matter
4:30 – 4:45 Dark Matter in the Classroom
4:45 – 5:00 Reflection

Evening Kirkwood Visit (weather permitting)

Friday, June 29

- 8:30 – 9:00 Breakfast
- 9:00 – 9:30 Dark Matter – What It Isn't
- 9:30 – 10:00 Experimental Searches for Dark Matter
- 10:00 – 10:15 Break

Closing in on Dark Energy

- 10:15 – 11:00 Large Scale Structure in the Hubble Deep Field
- 11:00 – 12:00 Supernova in Messier 51

- 12:00 – 1:00 Lunch discussion

- 1:00 – 1:45 Absolute Magnitudes of Supernovae
- 1:45 – 2:00 Just What Is a Supernova?
- 2:00 – 3:00 Dark Energy and How to Find It
- 3:00 – 3:15 Break

Wrapping Up

- 3:15 – 3:45 The Dark Universe
- 4:00 – 4:15 Cosmology Diagnostic Test
- 4:15 – 4:45 Closing Reflection
- 4:45 – 5:00 Closing Roundtable

Evening Kirkwood Visit (if poor weather on Thursday)