Introduction to Cosmology

Talk by Alexander Dueck at PhD seminar, 9-11 March 2011, MPIK

Contents

References

For "quick start" / introduction / if you do not want to get lost in details:

1. TASI Lectures on Inflation - William H. Kinney – arXiv:0902.1529v2
   This was the basis of the talk. Nice and very brief review. If you do not want to follow detailed calculations, but just want to get an idea and an overall picture very quickly.
2. Astrophysical Cosmology, Lecture notes by Alan Heavens, Edinburgh University
   http://www2.ph.ed.ac.uk/teaching/course-notes/documents/118/1446-AstrophysicalCosmology.pdf (or google "Alan Heavens Astrophysical Cosmology")
   Explains very nice. Historical start.
3. Nice web tutorial: http://www.astro.ucla.edu/~wright/cosmolog.htm
4. Roos, Introduction to Cosmology (quite short introductory text, brief on observations)
5. Bothun, Modern Cosmological Observations and Problems
6. Liddle, An Introduction to Modern Cosmology

For much more detailed discussions:

1. Kolb & Turner, The early Universe
2. John A. Peacock, Cosmological Physics
3. Weinberg, Gravitation & Cosmology
4. Peebles, Principles of Physical Cosmology