

PC 4691 - Frontiers of Astrophysics - Lectures 1&2

2&3 Pulsars (Kramer)

4&5 Interstellar Dust (Gray)

6&7 CMB (P. Wilkinson)

8&9 The Solar Corona (Veckstein)

10&11 Gravitational Lensing (Neal Jackson)

No independent study week

Resources:

ADS

http://adsabs.harvard.edu/abstract_service.html

Astro-ph (preprint arXiv)

xxx.soton.ac.uk

xxx.soton.ac.uk/find/astro-ph

Follow up references that are mentioned repeatedly

What else have the authors written?

What else has been written on this topic/star/galaxy?

CMB

WMAP

How can the CMB give information about cosmological parameters?

What do we know so far?

What are we hoping to learn in the near future (next decade)?

Other sources of anisotropy – e.g . defects and cosmic strings

Polarization of the CMB – what can it tell us?

Pulsars

Books available (but not required):

Pulsar Astronomy, Lyne & Smith (Science behind)

Handbook of Pulsar Astronomy, Kramer (Observing techniques)

<http://www.jb.man.ac.uk/doublepulsar>