



Cambridge Society for the Application of Research

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Casting Light on Dark Matter

A use for gravitational lensing

Dr Lindsay King
Institute of Astronomy, University of Cambridge

7.30 p.m., Monday 18th January, 2010
The Wolfson Lecture Theatre, **Churchill College**, Storey's Way, Cambridge

About the Lecture:

Dr King writes:

"During the past decade, a consistent picture of the universe where the dominant form of matter is cold and dark has emerged from various astronomical observations. In other words, most of the matter in the universe does not emit light or any other form of electromagnetic radiation that can be directly detected using telescopes. This talk will discuss the evidence for the existence of dark matter. In particular it will describe how gravitational lensing is used to detect and study the distribution of dark matter in massive objects in the universe, such as galaxies and galaxy clusters."

About the speaker:

Dr King graduated from Cambridge, and then completed her PhD at Manchester. She worked and studied in the USA and in Germany before returning to the United Kingdom. She holds Royal Society University Research Fellowship at the Institute of Astronomy here in Cambridge. Her professional interests embrace cosmology from both theoretical and observational perspectives.

The Organising Secretary adds....

Every so often, we need a good dose of cosmology. It clears the mind, and gets us thinking about higher things.

The CSAR has brought you lectures on the inside of stars; the single-photon imaging system on Hubble; and weighing galaxies. Dr King's lecture will be in the same tradition!

I did think of adding to the material she gave me. A brief exploration of the concepts of Dark Matter and Dark Energy quickly persuaded me otherwise.

Dr King is a well-known and highly regarded speaker on the phenomenon of gravitational lensing, especially as a tool for 'finding' Dark Matter. She has spoken on this subject many times. I am sure she will make it all very clear to us.

<http://www.ast.cam.ac.uk/astropod/interviews.html> is an interview with Dr King. Coffee will be available in the foyer outside the Wolfson Lecture Theatre from ~7.00 p.m.

This is a **joint lecture** with the Cambridge Philosophical Society. We share two lectures in our programmes; the Larmor Lecture (which takes place at the PhilSoc venue), and this, our first CSAR lecture of the New Year. It will be held at our normal time and place.

Best Regards
Richard Freeman
Organising Secretary

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